# Appendix **T**





US Army Corps of Engineers Galveston District 2012



USACE Galveston District, Southwestern Division

Luce Bayou Interbasin Transfer Project Liberty and Harris Counties, Texas

Environmental Impact Statement **Public Scoping Meeting Report**September 2011

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# Section 1 – Introduction

# 1.1 Project Background

The U.S. Army Corps of Engineers (USACE), Galveston District, intends to prepare a Draft Environmental Statement (DEIS) in compliance with the National Environmental Policy Act (NEPA) to assess the social, economic and environmental effects of the proposed Luce Bayou Interbasin Transfer Project. The DEIS will assess potential social, economic, and environmental impacts of the construction and operation of the proposed interbasin conveyance, associated facilities, and appurtenances. The primary Federal involvement associated with the proposed action is the potential discharge of dredged or fill material into waters of the United States, including wetlands, and the construction of structures that may affect navigable waters. Federal authorizations for the proposed project would constitute a "major federal action." Based on the potential impacts, both individually and cumulatively, the Corps intends to prepare the EIS in accordance with NEPA and to render a final decision on the Department of the Army permit application submitted to the Corps by the Coastal Water Authority.

The Coastal Water Authority is proposing to convey up to 400 million gallons of water per day (MGD) under gravity in accordance with the City of Houston's existing water rights permit from the Trinity River to Lake Houston, a distance of approximately 26.5 miles. The Trinity River water would be conveyed from the proposed pump station through large diameter pipelines to a sediment storage and settling basin and then through an earthen canal to outfall at the Lake Houston discharge point. The canal would have side berms and there would be an access road, drainage ditches, and perimeter fencing surrounding the water conveyance canal. The proposed project consists of the following:

- a. A new water pumping station will be constructed on the Trinity River at Capers Ridge approximately 10 miles north of Dayton, Texas
- b. Dual, 108-inch diameter force mains will be constructed extending from the Capers Ridge pump station approximately 3.5 miles to the west and southwest to outfall to the sedimentation settling basin
- c. An approximate 20-acre sedimentation settling and storage basin
- d. An approximate 23.5 mile clay-lined earthen canal with 4:1 side slopes within a 300-foot easement that would include access roads, berms, chain link perimeter fencing, flow control structures, and metering stations
- e. Box culverts at canal and roadway crossings and multiple below-ground siphons constructed to facilitate wildlife movement and maintain existing hydrology along the canal conveyance system
- f. An approximate 10-acre maintenance facility located approximately 6 miles north of Dayton, Texas
- g. Discharge structure along the southeastern shoreline of Lake Houston

Reasonable alternatives to the proposed project include No Action and an Offsite Alternative involving the construction of a new conveyance canal system and transfer under electrical power of approximately 900 MGD of water from Coastal Water Authority's existing Trinity River pump station



a distance of approximately 30 miles to Lake Houston. Additional alternatives may be proposed through the scoping process. As planned, the LBITP would be constructed and in operation to provide untreated water to the City of Houston by 2019.

A Public Notice concerning the LBITP was published on April 19, 2010, to initiate the public scoping process for the proposed project.

### 1.2 Definition of an Environmental Impact Statement

An EIS is a written document required by NEPA to be prepared for "major federal actions significantly affecting the quality of the human environment." Major federal actions are defined in the regulations implementing NEPA as actions "with effects that may be major and which are potentially subject to Federal control and responsibility" (40 CFR 1508.18). An EIS describes the purpose and need for an action, any alternatives that were considered in detail (including No action), the nature of the environment to be affected and the nature and significance of the environmental effects of a proposed action and alternatives. Mitigation measures must also be described for any unavoidable, adverse effects determined by the agency to be significant under the standards set in the regulations.

# 1.3 USACE Scoping Process

Scoping defined by 40 CFR 1501.7 is the open process of actively soliciting comment from the public, non-governmental organizations, and other interested federal, state, and local agencies with jurisdiction early in the permit evaluation process. Information obtained during scoping assists the SWG in 1) identifying potential environmental issues, alternatives, and mitigation measures associated with the development of the proposed project and 2) U.S. Army IP application review and decision-making. The scoping process provides a mechanism for developing an understanding of potential issues of concern and their scope to determine those issues that may have a significant impact on the human environment and that should be analyzed in depth during the development of an Environmental Assessment or a DEIS (40 Code of Federal Regulations [CFR] 1501.7 and 40 CFR 1508.25). The potential issues of concern that are not significant or that have been addressed during previous environmental reviews will also be identified and a summary explanation developed for further consideration.

Several Federal and non-Federal agencies will comment on the DEIS. Those agencies include the Environmental Protection Agency, the United States (U.S.) Fish and Wildlife Service, U.S. National Marine Fisheries Service, the Texas Commission on Environmental Quality, the Texas General Land Office, and the Texas Parks and Wildlife Department. Other agencies, including the Trinity River National Wildlife Refuge, Texas Water Development Board, and the Texas Department of Transportation, may also comment on the DEIS. Additional review and consultation that will be incorporated into the preparation of this DEIS as necessary will include: protection of cultural resources under Section 106 of the National Historic Preservation Act; protection of navigation under the Rivers and Harbors Act of 1899; protection of native terrestrial and aquatic species under the Aquatic Nuisance Prevention and Control Act of 1990; protection of water quality under Section 401 of the Clean Water Act; protection of air quality under the Clean Air Act; and protection of endangered and threatened species under Section 7 of the Endangered Species Act.

Scoping is a vital part of the NEPA process, and is one of the first steps undertaken when planning an EIS because of all the following:



- An "early and open process for determining the scope of issues to be addressed and for identifying the significant issues related to a proposed action" (40 CFR 1501.7).
- Provides agencies with a method to determine the scope of analysis in an EIS, meaning the nature of the actions, the alternatives, and the impacts to be analyzed.
- Helps agencies to "identify and eliminate from detailed study the issues which are not significant or which have been covered by prior environmental review" (40 CFR 1501.7).
- Involves Federal, State, and local agencies, affected Indiana tribes, the proponent of an action, and other interested persons (40 CFR 1501.7).
- Scoping is one of the 17 methods of reducing excess paperwork, and one of the 12 methods for reducing delay, as outlined in the regulations implementing NEPA (40 CFR 1500.4 and 1500.5).
- No standard format for scoping exists. Agencies have wide discretion in conducting scoping, as long as they get the results needed to continue the NEPA process. The USACE chose to hold meetings with other agencies and officials, and with the public. In addition, written comments were solicited through the Federal Register notices, announcements in local media, and the USACE web pages.

## 1.4 NEPA Requirements

Scoping is the coordination and consultation process required under the National Environmental Policy Act (NEPA) regulations to ensure that interested parties are allowed a forum to provide input on the issues to be analyzed by the environmental document. This process ensures that substantive issues and concerns, alternatives, and impacts are addressed in environmental documents and determines the scope and degree to which these issues and impacts will be analyzed. Scoping is required by the Council on Environmental Quality 1979 regulations (40 CFR 1501.7). Public involvement early in the scoping process is the first step in providing a solid foundation for all project activities.



# Section 2 – Description of the Scoping Process

## 2.1 Previous Scoping Activities

The U.S. Army Corps of Engineers (USACE), Galveston District (SWG), intends to prepare a Draft Environmental Statement (DEIS) to assess the social, economic and environmental effects of the proposed Luce Bayou Interbasin Transfer Project. The DEIS will assess potential impacts of a range of alternatives, including the No Action Alternative and a preferred alternative. The Federal action is consideration of a Department of the Army permit application for work under Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) and Section 404 of the Clean Water Act (33 U.S.C 1344).

The public involvement and scoping process was initiated upon receipt by the SWG of the U.S. Army IP application for the LBITP. The LBITP Public Notice was published on April 19, 2010, to initiate the public scoping process for the proposed project.

A Joint Evaluation Meeting (JEM) for the LBITP was held between stakeholder agencies and the SWG on February 10, 2010. Prior to that meeting, approximately 36 resource and/or regulatory agency meetings were held by Coastal Water Authority (Applicant) to provide project information and solicit agency comments concerning the proposed project. These meetings were held with the USACE, EPA, USFWS, TRNWR, USGS, USDA NRCS, and the Farm Service Agency; state agencies such as the TCEQ, TPWD, and TWDB; and, local agencies such as Harris County Flood Control District. These agencies and other stakeholders have provided information related to project concerns, suggestions, and approvals of approaches taken for resource evaluation and avoidance, habitat function and value assessment, and mitigation planning.

#### 2.2 Status or Use of 2010 Public Notice Comments

All comments received from the public and agencies in response to the April 2010 Public Notice for the LBITP will be considered by the Galveston District during the DEIS preparation process. See *Appendix A* for the April 19, 2010 Public Notice.

# 2.3 Summary of the 2011 Public Scoping Meeting

The U.S. Army Corps of Engineers, Galveston District conducted the Luce Bayou Interbasin Transfer Project (LBITP) Public Scoping Meeting on Thursday, July 21, 2011, from 5:30 p.m. to 8 p.m. at the Dayton Community Center, 801 South Cleveland, Dayton, Texas. The Agenda of the meeting is provided in *Appendix C*. Spanish and American sign-language (ASL) translators were available at the meeting for anyone needing translation assistance.

The scoping meeting included a workshop format with stations established by various project, NEPA and EIS process description board displays from 5:30 p.m. to 7:00 p.m., a 15-minute formal presentation by the SWG followed by the public comment period. The USACE and AECOM representatives were available at each station and were available to answer questions about the project or the EIS process.



#### 2.3.1 Attendees

Forty-three persons attended the Public Scoping Meeting including applicant representatives, public stakeholders, adjacent property owners, and some from public agencies. The Galveston District's **Commander Colonel Christopher Sallese** conducted the public scoping meeting. He was supported by Corps' staff members: **Casey Cutler**, Assistant Regulatory Branch Chief; **Isidro Reyna**, Public Affairs Specialist; **Pam Thibodeaux**, Head Registrar; **Jayson Hudson**, Project Manager/Runner, and **Mark Lumen**, Attorney-Advisor, Office of Counsel.

Meeting attendees were invited to submit comments about the proposed project through July 29, 2011, the official end of the commenting period. Comments were submitted to the Corps' Project Manager Jayson Hudson via a number of ways:

- Regi stered verbal comment
- Facsimile message
- U.S. Postal Mail
- Electronic mail or e-mail

In addition to signing in at the registration table, attendees were provided a comment handout sheet and a speaker card to complete and return during the meeting. The sign-in registration sheets and the speaker cards are provided in *Appendix B*. The Speaker Cards indicated if the attendee desired to make a public comment at the meeting. Throughout the meeting, Colonel Sallese asked for input from attendees. A listing of attendees is also included in the Public and Agency Comments section of this report as part of the meeting transcript.

#### 2.3.2 Speakers

Three individuals gave public comments at the meeting: affected property owners **Fred Masters** and **Richard Bumstead** and Houston Sierra Club representative **Brandt Mannchen**. Speakers were permitted to speak as long as they wanted, but no one spoke more than 5 minutes.

#### 2.3.3 Displays, Handouts, and Photographs

A number of 30-inch by 40-inch displays and exhibits were presented at the Public Scoping Meeting along with several handouts. *Appendix C* includes copies of materials presented at the meeting.

#### 2.3.4 Advertisements and Publicity Coverage

The legal advertisement for the LBITP Public Scoping Meeting was published on July 21, 2011, in the following newspapers on the dates listed below. Copies of the newspaper notices and affidavits of publication along with the USACE website notice are also provided in *Appendix A*. Photographs of the meeting and post-event publicity are provided in *Appendix D*.

- The Liberty Gazette (July 5, 2011)
- Houston Chronicle (July 6, 2011)
- Dayton News (July 6, 2011)



- Cleveland Advocate (July 6, 2011)
- Eastex Advocate (July 6, 2011)
- The Lake Houston Observer (July 7, 2011)
- Liberty Vindicator (July 7, 2011)
- La Voz (July 10, 2011)

The Public Scoping Meeting Notice was translated into Spanish and published in the Spanish language newspaper *La Voz* on July 10, 2011. *La Voz* is a Spanish newspaper that is published on Sundays in the *Houston Chronicle*.

## 2.3.5 Meeting Announcements and Distribution Lists

In addition to the Public Notices, a Public Scoping Meeting announcement was developed and was mailed to over 300 residences on June 29, 2011, and area churches on July 6, 2011, using U.S. first-class mail. The Public Scoping Meeting announcement (i.e., flyer) was followed up with a post card reminder card that included the meeting location map. Copies of the meeting mail piece and distribution lists are provided in *Appendix E*.



# Section 3 – Comment Summary

#### 3.1 Introduction

The SWG received verbal, written, and electronic comments during the scoping comment period, as shown in the Public and Agency Comments section of this report. The commenting period was initiated when the NOI was published in the *Federal Register* on May 25, 2011. Comments were received after the publication of the Public Notice in 2010, during the Public Scoping Meeting as recorded and transcribed in the meeting transcript, and during the Commenting Period after issuance of the NOI in the Federal Register on May 25, 2011 and ending July 29, 2011. Two hundred twenty-four substantive comments were recorded and transcribed as summarized in *Table 1*. Written comments were received during and after the Public Scoping Meeting on comment forms provided to the public during the meeting and in letters provided to SWG following the meeting.

Potential effects associated with the proposed LBITP to be provided detailed analysis in the DEIS are likely to include, but may not be limited to, potential direct effects to waters of the United States including wetlands; water quality; aquatic species; air quality; environmental justice; socioeconomic environment; archaeological and cultural resources; recreation and recreational resources; energy supply and natural resources; hazardous waste and materials; aesthetics; public health and safety; navigation; erosion and accretion; invasive species; cumulative impacts; public benefit and needs of the people along with potential effects on the human environment. These and other public interest review factors identified by 33 CFR 320.4 will be evaluated by the DEIS.

Written and electronic comments were provided to Mr. Jayson Hudson, Project Manager, U.S. Army Corps of Engineers, P.O. Box 1229, Galveston, Texas 77553 by mail or facsimile transmission or could be submitted via e-mail to Jayson.M.Hudson@usace.army.mil until the end of the public comment period established as June 30, 2011. A total of 224 substantive comments were received by the end of the public comment period.

# 3.2 Organization of Comments

The 224 comments received during public comment were organized into 20 major categories based on the nature and type of the comment. The list of comment organizational categories is provided in *Table 1*:

 Number of Comments
 Comment Category

 21
 NEPA/EIS Sections 404 and 10 Permit Processes

 1
 Public Involvement

 9
 Project Description/Definition

 9
 Alternatives, including No Action

 24
 Impact Assessment Methodology/Cumulative Effects Analysis

 14
 Facility Considerations (Construction, Operation, Maintenance)

**Table 1. LBITP Comment Categories** 



Table 1. cont.

Number of Comments	Comment Category
16	Sustainability or Quality of Life
5	Water Supply/ Water Quality
25	Wetlands/Wetland Mitigation
11	Hydrology
6	Climate Change
28	Aquatic/Terrestrial Species and Assorted Habitat Impacts
12	Invasive Species
6	Surface Water Resources
1	Threatened and Endangered Species
2	Floodplains/Riparian Habitat
7	Erosion/Sedimentation
13	Instream Flows/Freshwater Inflows
5	Interbasin Transfer/Ecological Considerations
9	Land Use/Property Values
224	Total Substantive Comments

The Comment Summary *Table 3* is located immediately after the report beginning on page 13.

#### 3.2.1 Comments Within the Scope of the EIS

A Scope of Work for the DEIS has been prepared and is part of the EIS Work Plan.

Substantive "within Scope" comments from the 2010 Public Notice and 2011 Public Scoping Meeting will be reviewed against the current scope of work and modified as needed in order to address the identified issue at the level of detail recommended by the scoping comment. If necessary for clarity within the text of the DEIS, scoping comments may be referred to so that public and agency reviewers will know that a particular concern or issue is addressed in the DEIS.

Twenty-six percent of the comments made or tabulated focused attention on the need to provide detailed analysis from various perspectives on aquatic and terrestrial organisms including invasive species, and their related habitat. If one adds the comments relating to the effects of instream flows and freshwater flows to Galveston Bay, then the percentage of comments relating to aquatic and terrestrial organisms is over 35 percent of the total comments provided. Consequently, specific attention will be paid in the EIS on the accurate description of impacts to these organisms and their habitats.

Other major issue areas receiving comment include hydrological impacts of the proposal, land use and property value impacts, followed by comments relating to climate change, erosion and sedimentation, and water supply and water quality considerations.



#### 3.2.2 Issues Outside the Scope of the EIS

SWG has determined that the comments received concerning the quality of life for Houston area residents, sustainability of existing and projected population growth, or development of an understanding of the carrying capacity of the Houston area by resource are outside the scope of the EIS process and will not be evaluated further by the LBITP EIS.

#### 3.2.3 Determination of Work Needed to Address Scoping Comments

Based on the LBITP scoping process, public interest review and the information developed for the LBITP, additional studies or data that may need to be collected or conducted will be determined through the implementation of a data gaps analysis. Data gaps that may exist between the information and data that have already been provided to SWG and the nature and extent of each scoping comment by resource category will be identified. After these data gaps are identified, the path forward to address an issue or resource will be identified, evaluated and approved prior to implementation by SWG.

The data, material or studies provided by the Applicant to SWG include a Section 404 Individual Permit application, a 404(b)(1) alternatives evaluation, Preliminary Wetlands and Waters of the U.S. Jurisdictional Reports, and an Environmental Report. The Environmental Report generally represents the summary or results of in-depth studies, reports, analyses, or findings based on data collection/assessment efforts. The LBITP EIS will be structured so that the environmental effects of the proposed project and alternatives are described in sufficient detail for the public and the USACE to understand the implications of the permit decision. Existing or publicly available studies, data, models, reports, and technical memorandum pertinent to the scoping comments will be reassessed for appropriateness for use in responding to scoping comments. In some cases, there may be data gaps identified for specific comments/resources for which a literature search or literature search updates may be deemed sufficient to address/evaluate by the LBITP EIS document. Each comment will be considered on a case-by-case basis since each resource concern, applicable comment, and potential data need or requirement is anticipated to be generally unique. The general procedure for moving forward to evaluate and address public comment through the LBITP EIS process is provided below.

- Continue with the preparation of a comment matrix with five headings or categories: comment, source, resource/issue, response, and data gaps.
- Develop an understanding of existing or available data for each resource/response through research of the electronic and paper copy file system(s) (Administrative Record) established for the LBITP EIS effort contained and managed on the separate file server or located in controlled lateral file cabinets. Consult agency and other publicly available data sources, subject matter experts, and conduct Internet and literature research into best available data per resource/comment, as appropriate.
- Specifically evaluate each resource/comment to determine the available, existing data, studies, technical memorandum, reports, calculations, models, or analyses that may be relevant to the issue(s) or concerns identified.
- Identify and screen available technical data that may be applicable to each comment using best available data review/assessment techniques (see EIS Work Plan, Section 2.4.2 -Development and Use of Best Available Data, Section 2.4.3 - Synthesis of Best Available Data, and Appendix C) and document accordingly per resource category.



- Review best available scientific and technical information available to determine data gaps per resource/comment and an initial or preliminary assessment of potential options to address or close these data gaps.
- Document in the comment response matrix and discuss internally to achieve a general consensus and determine path forward through team input.
- Present findings and rationale to Jayson Hudson for review, comment, and update.
- Prepare, as needed, scopes of work, methodologies, or procedures to evaluate identified resource/comment data requirements.
- With SWG approval, implement studies, methodologies, or data collection activities as needed to meet the goals of the LBITP EIS full disclosure requirements.
- Develop reports, technical memorandum, summary documentation (as appropriate) and incorporate into the LBITP EIS, as directed by SWG.



# Section 4 – Future Activities Which Require Public and Agency Input

The NEPA process provides several opportunities for public input. Table 2 identifies additional opportunities for public participation and the anticipated schedule for the public to provide comments and participate in the EIS environmental review process. Following the scoping period, the DEIS will be prepared incorporating appropriate information received from the public during the scoping period. Once the DEIS is completed, USACE will issue a Notice of Availability (NOA) for publication in the Federal Register, and the document will be distributed for public review. During the review period, the public can comment on key issues and the adequacy of the purpose and need, alternatives analysis, and proposed mitigation presented in the DEIS. During the public comment period, public hearing(s) will be held to allow the public to formally present their comments on the DEIS. The comments received during the public comment period will be considered by the USACE in preparing the Final EIS. In addition, the DEIS comments and USACE responses to the comments will be included as an appendix in the Final EIS. Once the Final EIS is completed, the USACE will issue a Notice of Availability (NOA) for publication in the Federal Register, and the document will be distributed for public review. Following the Final EIS public review period, the USACE will issue a final decision as to whether to issue a Department of the Army Individual Permit (of the FEIS), issue the permit with special conditions, or deny the permit.

Table 2. Opportunities for Participation in the NEPA Process

Steps in the Process	Anticipated Date or Time Frame
Public Scoping	Typically a 30- to 45-day period following NOI publication (ended July 29, 2011)
Publication of the DEIS	December 2011
DEIS public comment period (including public hearings)	Typically a 45- to 60-day period following DEIS NOA publication
Publication of the Final EIS	December 2012
Final EIS public review period	Typically a 30-day period following Final EIS NOA publication



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**Table 3. Comment Summary** 

Resource / Issue	Comment	Commenter
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NEPA/ EIS Sections 404 and10 Permit Processes	
The permit notice is inadequate as a basis for determining the full environmental impacts of this proposal and the effect that this proposal will have on the public interest review factors in 33 CFR 320-332, regulatory programs of the Corps, and other pertinent laws, regulations, and executive orders.	Brandt Mannchen, Sierra Club, April 30, 2010 letter
There should be a public comment period so the public can review, comment on, and understand the full environmental impacts of this water conveyance structure, associated developments, and any secondary development that this proposal will promote by providing water to the Houston area.	Brandt Mannchen, Sierra Club,
If the Corps has the applicant prepare the EIS then the Corps must ensure it makes the EIS its own, as required by law, and not just accept the EIS and place the Corps name on the cover of the document, and release the EIS to the public	April 30, 2010 letter
Title 30, Texas Administrative Code (TAC), Chapter 279.II(c)(I), states that "No discharge shall be certified if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, " Practicable alternatives are preliminarily assumed to exist, but the applicant does have the opportunity to clearly demonstrate that no practical alternatives exist. Please have the applicant complete the enclosed 401 Tier II Questionnaire and Alternatives Analysis Checklist.	Charles Mcguire, TCEQ, May 18, 2010 letter
No action will be taken on this permit application because of our current workload.	Heather Young, NOAA, May 24, 2010 e-mail
This practicable alternative is "available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes." In addition, as required by the Section 404(b)(1) guidelines, "If it is otherwise a practicable alternative an area not presently owned by the applicant which could reasonably be obtained, utilized, expanded or managed in order to fulfill the basic purpose of the proposed activity may be considered."  There is no convincing documentation in the permit application Public Notice that shows that the applicant cannot construct this water conveyance structure, associated developments, and any secondary development that this proposal will promote in the Houston area without destroying or degrading nearby wetlands. This type of analysis has not been included in the Public Notice.	Brandt Mannchen, Sierra Club, July 23, 2011 letter (also in April 30,
This proposal does not comport with Section 404(b)(1) guideline, which are mandatory for the Corps to follow as part of the implementation strategy that the Clean Water Act requires. Section 404(b)(1) guidelines require that non-water dependent actions must not be permitted to destroy wetlands which are "special aquatic sites."	2010 letter)
This proposal is a "major federal action significantly affecting the quality of the human environment."	Brandt Mannchen, Sierra Club, June 8, 2011 letter
Some of the public interest review factors that must be considered and are relevant include conservation, economics, aesthetics, air quality, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, and the needs and general welfare of the people.	Brandt Mannchen, Sierra Club, June 8, 2011 letter (also in April 30, 2010 letter)

**Table 3. Comment Summary** 

Resource / Issue	Comment	Commenter
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The Corps must include information in the EIS so the public and decision makers will **not** [*sic*] be aware of the magnitude and significance of the proposed water conveyance structure, associated structures, and any secondary development that this proposal will promote by providing water in the Houston area. The need for this information and for an EIS is documented by the following NEPA Regulations:

- 1. 1500.1(b), "NEPA procedures must insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA."
- 2. 1500.1(c), "The NEPA process is intended to help public officials make decisions that are based on understanding of environmental consequences."
- 3. 1500.2(b), "Implement procedures to make the NEPA process more useful to decision-makers and the public."
- 4. 1500.2(d), "Encourage and facilitate public involvement in decisions which affect the quality of the human environment."
- 5. 1500.4(b), "Preparing analytic rather than encyclopedic environmental impact statements."
- 6. 1500.4(1), "Emphasizing the portions of the EIS that are useful to decision-makers and the public."
- 7. 1501.2(b), "Identify environmental effects and values in adequate detail so they can be compared to economic and technical analyses."
- 8. 1502.2, "EISs shall be analytic rather than encyclopedic."
- 9. 1502.4(a), "Agencies shall make sure the proposal which is the subject of an EIS is properly defined,"
- 10. 1502.16, "This section forms the scientific and analytic basis for the comparisons...[sic] environmental impacts of the alternatives including the proposed action, any adverse environmental effects which cannot be avoided should the proposal be implemented, the relationship between short term uses of man's environment and the maintenance and enhancement of long-term productivity, and irreversible or irretrievable commitments of resources."
- 11. 1502.21, "No material may be incorporated by reference unless it is reasonably available for inspection by potentially interested persons within the time allowed for comment."
- 12. 1502.24, "Agencies shall insure the professional integrity, including scientific integrity, of the discussions and analyses in EISs. They shall identify any methodologies used and shall make explicit reference by footnote to the scientific and other sources relied upon for conclusions in the statement."
- 13. 1506.6(a), "Agencies shall make diligent efforts to involve the public in preparing and implementing their NEPA procedures."
- 14. 1508.3, "Affecting means will or may have an effect on."
- 15. 1508. 14, "Human Environment shall be interpreted comprehensively to include the natural and physical environment and the relationship of people with that environment. When an EIS is prepared and economic or social and natural or physical environmental effects are interrelated then the EIS will discuss all of these effects on the human environment."
- 16. 1508.18, "Major Federal action includes actions with effects that may be major and which are potentially subject to Federal control and responsibility. Major reinforces but does not have a meaning independent of significantly. Actions include new and continuing activities, including projects... approval of specific projects, such as construction or management activities located in a defined geographic area."

Brandt Mannchen, Sierra Club, June 8, 2011 letter

**Table 3. Comment Summary** 

Resource / Issue	Comment	Commenter
17. 1508.27 Context medinstance, in in the locale may be both believes tha area. The dehighly control unique or ur but cumulati	n of above comment:  "Significantly as used in NEPA requires considerations of both context and intensity."  "In the significance of an action must be analyzed in several contexts."  "In the case of a site-specific action, significance would usually depend upon the effects of rather than in the world as whole. Intensity refers to the severity of impacts. Impacts of beneficial and adverse. A significant effect may exist even if the Federal agency of the balance the effect will be beneficial. Unique characteristics of the geographic egree to which the effects on the quality of the human environment are likely to be oversial. The degree to which the possible effects are highly uncertain or involve alknown risks. Whether the actions related to other actions with individually insignificant the vely significant impacts. Whether the action threatens a violation of Federal, State, or requirements imposed for the protection of the environment."	Brandt Mannchen, Sierra Club, June 8, 2011 letter
deal with the present the	ative assessment, analysis, and evaluation of environmental impacts is not sufficient to e clearly articulated CEQ requirements in Section 1502.14, that the EIS "should environmental impacts of the proposal and the alternatives in comparative form, thus ning the issues and providing a clear basis for choice among options by the decision-he public."	Brandt Mannchen, Sierra Club, June 8, 2011 letter
	assessment, analysis, and evaluation are necessary to ensure that alternatives and tal impacts are clearly defined and shown in the EIS.	Brandt Mannchen, Sierra Club, June 8, 2011 letter
they can be will be base environmen consist of m stated in Se analyses. The	Section 1501.2(b), "Identify environmental effects and values in adequate detail so compared to economic and technical analyses." As stated in Section 1502.8, "which d upon the analysis and supporting data from the natural and social sciences and the tal design arts." As stated in Section 1502.18(b), about the Appendix, "Normally aterial which substantiates any analysis fundamental to the impact statement." As ction 1502.24, "Agencies shall insure the professional integrity, of the discussions and ney shall identify any methodologies used and shall make explicit reference by he scientific and other sources relied upon for conclusions in the statement."	Brandt Mannchen, Sierra Club, June 8, 2011 letter
judgment." decide what	s that the Corps must conduct for this EIS is much more than "best professional "Best professional judgment" is where a group of people, using their experience, is important. This level of assessment, analyses, and evaluation for environmental alternatives is an insufficient foundation upon which to base an EIS.	Brandt Mannchen, Sierra Club, June 8, 2011 letter
and underst structures, a the Houston of phrases u not provide implementin proposed ac impacts of the	nust define what phrases and words mean so that the public can review, comment on, and what the Corps refers to regarding this water conveyance structure, associated and any secondary development that this proposal will promote by providing water in area. Decision-makers also need to know this information. The qualitative description used to describe environmental impacts or the protectiveness of an alternative does the public with the degree of comparison required by the CEO's mandatory NEPA ag regulations. These regulations state, in Section 1502.14, Alternatives including the extion, that, "This section is the heart of the EIS. It should present the environmental the proposal and the alternatives in comparative form, thus sharply defining the issues ag a clear basis for choice among options by the decision-maker and the public. Stantial treatment to each alternative in detail so that reviewers may evaluate their emerits."	Brandt Mannchen, Sierra Club, June 8, 2011 letter

**Table 3. Comment Summary** 

Resource / Issue	Comment	Commenter
section form alternatives on this discu of each alter used qualitatinformation.	so states, in Section 1502.16 and (d), Environmental consequences, that, "This is the scientific and analytic basis for the comparisons. The environmental effects of including the proposed action the comparisons under Section 1502.14 will be based assion. It is key that the Corps clearly compare and make apparent the distinctiveness mative and its impacts or protectiveness. This is not accomplished when phrases are tively instead of quantitatively with more detailed and clear descriptions of qualitative. The Sierra Club requests that the Corps clarify and detail clearly the comparative between each alternative and define clearly what the words or phrases used mean.	Brandt Mannchen, Sierra Club, June 8, 2011 letter
404(b)(1) gu	s knows the presumption is that practicable alternative sites exist in the Section idelines "unless clearly demonstrated otherwise." No such "clearly demonstrated provided in the Public Notice. There is no alternatives analysis provided.	Brandt Mannchen, Sierra Club, June 8, 2011 letter (also in April 30, 2010 letter)
	ne on the mailing list to receive scoping announcements and summaries and for the entire NEPA process for the Luce Bayou Interbasin Transfer Project.	Professor Paul Friesema, North- western University, May 25, 2011
Need to add	lress all potential impacts of the project and/or potential alternatives.	Sharon Fancy Parrish, U.S. EPA, May 17, 2010
unquantified	dation is to prepare an EIS given identified impacts and assumed substantial and unidentified impacts associated with the project including impacts to the human tand potential controversy.	Bruce Bodson, Individual, may 19, 2010
Request per	mit not be issued as presented in the project plans.	Rebecca Hensley, TPWD, May 26, 2010
Public Invo	lvement	
meetings or the Corps to about this propeople are so meeting or hoccur late in meeting or hocmment pe	illability of the Draft EIS, the Sierra Club requests that it be notified about any public hearings that deal with this proposal. In addition, the Sierra Club strongly encourages give the public at least 4 weeks of notice before holding any public meeting or hearing roposal. This longer lead time than the two weeks the Corps proposes is needed since so busy that they need advanced lead time to schedule and prepare for any public hearing. It makes sense that any public meeting or hearing that is held on the DEIS the comment period so that the public has time to read the EIS before the public hearing. The Sierra Club urges the Corps to provide from 60-90 days of public eriod on the DEIS due to the significant and complicated nature of this project and the size that the DEIS will be.	Brandt Mannchen, Sierra Club, June 8, 2011 letter

**Table 3. Comment Summary** 

Resource / Issue	Comment	Commenter	
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Project Description/Definition	
What length, in miles, of Luce Bayou will be used to convey water?	Brandt Mannchen, Sierra Club, April 30, 2010 letter
In addition, the "water supplies required by existing water supply contracts" and "necessary water supplies to meet contracted demands identified by the City of Houston" must be fully explained in the DEIS so the full environmental impacts of these decisions are clearly elucidated.	Brandt Mannchen, Sierra Club, June 8, 2011 letter
Page A-1, Project Description, Summary, the phrase, "Houston metropolitan area" is used. This phrase must be defined so the public will understand the magnitude and extent of the area that this proposal will provide water to with regard to cumulative environmental impacts.	Brandt Mannchen, Sierra Club, June 8, 2011 letter
Page 4, Notice of Intent, 3. Purpose and Need, the phrase "surrounding area" is used with regard to where the water will go that is conveyed by this proposal. This phrase must be defined so the public will understand the magnitude and extent of the area that this proposal will provide water to with regard to cumulative environmental impacts.	Brandt Mannchen, Sierra Club, June 8, 2011 letter
I would like to know where the project will cross FM 1008 as I own land in this area. Also, if possible I would request a map of the project.	David McCullough, property owner, August 2, 2011
All utility lines including electrical transmission lines associated with the project should be included in project description	Stephen Parris, USFWS, May 19, 2010
There is a contradiction between the Notice of Intent and the Luce Bayou Interbasin Transfer Project Description. On page 2 of the Notice of Intent, 400 MGD is used as the conveyance water volume that will be transferred while on page A-1 of the Project Description, Summary, the figure used is 500 MGD.	Brandt Mannchen,
Page A-1, Project Description, Summary, here the canal is described as entering Lake Houston on the "northeastern shoreline." However, page 3, Notice of Intent, 1. Project Background, the discharge structure is described as being along the "southeastern shoreline of Lake Houston." Which description is correct?	Sierra Club, June 8, 2011 letter
Page A-1, Project Description, Summary. This project description sounds like a justification for the project by the applicant and not a factual description of the project.	

**Table 3. Comment Summary** 

Alternatives, including No Action	
Page 5, Notice of Intent, 5. Public Involvement, this part of the Public Notice talks about "public benefit and needs of the people." It is important to note that not implementing this proposal also has public benefit and needs and that for each alternative the public benefit and needs may be different and must be identified in the EIS. The reason that there is a public benefit for not implementing the proposal is that all environmental, social, and financial impacts will be avoided if the proposal is not implemented and most of the environmental, social, and financial impacts that additional growth in population and development that are caused by this proposal will be avoided. The avoidance of these environmental, social, and financial impacts is considerable and significant.	Brandt Mannchen, Sierra Club, June 8, 2011 letter
Evaluate other possible alternatives to offset the need for the new raw water system.	Sharon
The current design of the canal as a trapezoidal, open ditch should be evaluated and compared to the design of a natural channel conveyance structure with a forested bufffer and functioning as a natural stream.	Fancy Parrish, Chief
Viable alternatives including a combination of hydraulic desiltation of Lake Houston and beneficial use of dredged material to gain acre feet of storage capacity in Lake Houston and upgrade of existing system to offset need for new transfer and conveyance system and the significant impacts to the aquatic ecosystem.	Wetlands Section, U.S. EPA, May 17, 2010
The proposed alignment should be moved 2,000 feet west of current alignment along FM 634 to maintain/secure water supply and prevent contamination of water supply and physical attacks.	Richard Bumstead, Property Owner, May 17, 2010
Discuss why the existing Trinity River Pump Station could not be upgraded to meet water demand from this location on the Trinity River.	Sharon Fancy Parrish, Chief Wetlands Section, U.S. EPA, May 17, 2010
Practicable alternatives do exist as shown on sheet 2 of 44. However these alternatives are not explained, their environmental impacts are not stated, there is no comparison of environmental impacts between these alternatives and the proposed action, and no mitigation requirements are presented for these alternatives. The alternative shown on sheet 2 of 44, which begins at the existing Trinity River Pump Station and appears to cover a shorter distance than the proposed alternative but the public cannot determine the comparative advantages or disadvantages because these are not explained in the Public Notice.	Brandt Mannchen, Sierra Club, June 8, 2011 letter (also in April 30, 2010 letter)
As the Corps knows the presumption is that practicable alternative sites exist in the Section 404(b)(1) guidelines "unless clearly demonstrated otherwise." No such "clearly demonstrated analysis" is provided in the Public Notice. There is no alternatives analysis provided.	Brandt Mannchen, Sierra Club, June 8, 2011 letter
An all or mostly all pipeline alternative(s) should be analyzed as a reasonable alternative(s) for the proposed action.	Brandt Mannchen, July 23, 2011 letter

**Table 3. Comment Summary** 

Impact Ass	Impact Assessment Methodology/ Cumulative Effects Analysis		
acts	There is nothing in the Public Notice which talks about the impacts that this water conveyance structure, associated structures, and any secondary development that this proposal will promote by providing water in the Houston area will have on wildlife.	Brandt Mannchen, Sierra Club, June 8, 2011 letter	
Cumulative Impacts	The potential for project expansion, such as additional right-of-way and additional impacts to fish and wildlife habitat.	Rebecca Hensley, TPWD, July 28, 2011	
Cum	The Corps should require that the applicant conduct a cumulative environmental analysis, assessment, and evaluation for this water conveyance structure, associated developments, and any secondary development that this proposal will promote in the Houston area.	Brandt Mannchen, Sierra Club, April 30, 2010 letter	
	The DEIS should reveal what more than doubling the population will mean for Houston area residents, their children, and grandchildren regarding noise.	Brandt Mannchen, Sierra Club, June 8, 2011 letter	
	For cumulative impacts, the EIS must state what the conveyance water volume will be, including any possible expansion possibilities beyond 400-400 [sic] mgd due to the acquisition or use of additional water rights from the Trinity River or other sources of surface or groundwater. For instance, there is a proposal to transfer a very large volume of water from the Sabine River to Lake Livingston via canal or pipeline. This project has been described as a water management strategy in the Region H and Region I Water Plans. The cumulative impacts of connecting these diversions must be addressed in the EIS.	Brandt Mannchen, Sierra Club, June 8, 2011 letter	
	For cumulative environmental impacts, the amount of each air pollutant emitted should be provided. For example, nitrogen oxides (NO <sub>2</sub> ); carbon monoxide (CO); volatile organic compounds (VOC); sulfur dioxide (SO <sub>2</sub> ); mercury (Hg); other metals; and radioactive elements.	Brandt Mannchen, Sierra Club, June 8, 2011 letter	
	The cumulative environmental impacts should include a discussion of how building to the "projected, estimated, anticipated growth" often creates a self-fulfilling prophesy of need for water.	Brandt	
	There is no reason that a reasonable estimate of cumulative environmental impacts (based upon population increases and development that occurs from these increases that are made possible by the water made available by the Luce Bayou Project) for the Luce Bayou Project cannot be determined using the Region H Water Plan and other sources of information.	Mannchen, Sierra Club, June 8, 2011 letter	

**Table 3. Comment Summary** 

Resource / Issue	Comment	Commenter
	In the Executive Summary of the Region H Water Plan, page ES-3, Region H will grow from 6 million people in 2010 to 11.3 million people in 2060. <b>Their</b> [ <i>sic</i> ] 10 year population projections [ <b>that</b> ] [ <i>sic</i> ] can be used as estimates if the 50 year future projection is deemed too distant for "future foreseeable" actions and cumulative environmental impacts. On page ES-5, water demand will increase in from 2.38 million acre-fee/year in 2010 to 3.52 acre-fee/year in 2060. On page 2-59 of the RHWP, for Harris County alone, the acre-feet figures are: 2010 - 1,130,740 2020 - 1,255,987 2030 - 1,363,515 2040 - 1,470,305 2050 - 1,575,123 2060 - 1,663,105  So the applicant and the Corps can determine via the amount of water that will be delivered each year the approximate population and development that this generates and supports. This cumulative environmental impacts analysis must be in the DEIS and include the direct and indirect environmental impacts that are generated by delivering this amount of water.	Brandt Mannchen, Sierra Club, June 8, 2011 letter
	The Sierra Club requests the Corps fully examine all cumulative impacts due to this water conveyance structure, associated structures, and any secondary development that this proposal will promote, by providing water in the Houston area in the DEIS. Cumulative impacts of all past, present, and future foreseeable actions must be identified and their impacts must be assessed, analyzed, and evaluated. The EIS cumulative impacts analysis must comply with the CEQ NEPA implementing regulations, 40 CFR 1502.16, 1508.7, 1508.8, 1508.25, and 1508.27.	
	In addition, the Corps must consider cumulative impacts when looking at public interest review factors in 33 CFR 320-332, like conservation, air quality, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs safety, food and fiber production, mineral needs and, in general, the needs and welfare of the people.	
	The Corps must use the CEQ's January 1997 document, "Considering Cumulative Effects Under the National Environmental Policy Act" for determining cumulative impacts and carrying out its analysis, assessment, and evaluation. It is clear that the Corps has an affirmative duty, a statutory duty, and a regulatory duty to carry out cumulative impacts assessment.	
	Cumulative impacts for this proposal are the key to determining what the total potential environmental impacts will be. Cumulative impacts will be massive since they are the result of the provision of water for hundreds of thousands to millions of people plus all the residential, commercial, institutional, and industrial development that will be constructed to support the settlement of this many people.	
	Three cumulative impact actions and their environmental impacts that should be analyzed in the DEIS are the proposed Grand Parkway, Segment H, Segment I-1, and the proposed Bayport-Cleveland Corridor.	Brandt Mannchen, Sierra Club July 23, 2011 letter
	Evaluate the cumulative impacts of the proposed project with other projects in the San Jacinto River and Lower Trinity River watersheds including the proposed Grand Parkway Segment H and Segment I-I.	Rebecca Hensley, TPWD, July 28, 2011

**Table 3. Comment Summary** 

Resource / Issue	Comment	Commenter	
	Loss and reduction of freshwater inflows from the Trinity River basin into downstream bays and estuaries; secondary, cumulative, secondary effects of such a reduction and loss are requested. Secondary impacts and cumulative effects may be significant and an EIS should be developed for this project.	Sharon Fancy Parrish, U.S. EPA,	
	Direct, secondary, and cumulative loss of freshwater wetlands and potential impacts to bays and estuaries is a concern and should be evaluated.	May 17, 2010	
	It is obvious that this water conveyance structure, associated developments, and any secondary development that this proposal will promote by providing water to the Houston area (like northern Harris County, southern Montgomery County, and other counties farther west) will alter overland flows, drainages, and flatwoods.	Brandt Mannchen, Sierra Club, June 8, 2011 letter	
	Cumulative impacts, there's two large projects: One is in the DEIS Phase right now, which is the Proposed Grand Parkway H and I-1. You should look at that project and cumulative impacts from that, plus this project. There's also a project I just became aware of called the Bayport-Cleveland Corridor, and so you may also want to look at that as far as future foreseeable as whether that might have some environmental impact.	Brandt Mannchen, Sierra Club, Public Scoping Meeting	
	Since the proposal is based upon population projections (which are not given in the scoping notice but must be in the DEIS) then it should be simple to determine the approximate area in acreage that may be developed to accommodate the increase in population that population projections assume.	Brandt Mannchen, Sierra Club, June 8, 2011 letter	
	Water conveyance structure, associated structures, and any secondary development that this proposal will promote by providing water in the Houston area have in relation to environmental impacts. This includes the qualitative and quantitative impacts on flooding and water quality in the area including long-term environmental impacts that this proposal will have.		
	By providing the water it is obvious that via induced development that the entire Houston area will be potentially opened up for commercial, industrial, and residential development as well as water quality (stormwater run-off and sewage treatment plants) and drainage impacts (ditching and channelization of streams).	Brandt Mannchen, Sierra Club, April 30, 2010 letter	
Impact Assessment Methodology	There is a need to conduct pre-operational baseline studies, transfer operation studies, and post operational studies. The Sierra Club recommends that there be at least 3 years of pre-operational baseline studies; 1 year of transfer operation studies; and three years of post-operational studies to determine the impacts that the proposal may have on the Trinity River, San Jacinto River, Lake Houston, Galveston Bay, and the other water bodies mentioned in this comment letter.	Brandt Mannchen, Sierra Club July 23, 2011 letter	
Impact A Metho	The sampling protocol for the proposal should be (1) designed to account for long-term variability within river basins; (2) examine changes in spatial-temporal variability among multiple trophic levels; and (3) make biologically sound comparisons between river basins.	Brandt Mannchen, Sierra Club July 23, 2011 letter	
Facility Co	Facility Considerations (Construction, Operation, Maintenance)		
Constructi on	Additional information is needed on the location and size of the sediment basin and storage areas. In addition, please provide a long term management plan for these sites.	Stephen Parris, USFWS, May 19, 2010 letter	

**Table 3. Comment Summary** 

Resource / Issue	Comment	Commenter
	The proposal does not document how many total acres will be needed for the 26.5 mile ROWif you consider the pumping station or other ancillary uses.	Brandt Mannchen, Sierra Club, April 30, 2010 letter
	Page A-5, Project Description, 3.1.6 Temporary Construction Impacts at the Trinity River and Lake Houston, the DEIS must specifically describe the temporary construction equipment and methods that will be used; what the environmental impacts are of each piece of equipment and method; and which construction equipment and methods have the least environmental impacts.	Brandt Mannchen, Sierra Club, June 8, 2011 letter
	Potential impacts (physical removal of nesting habitat and disturbance from human foot traffic and machinery use) to heron, egret, and other bird rookeries during construction of the proposed project.	Rebecca Hensley, TPWD, July 28, 2011
	Page A-1, Project Description, Summary, the DEIS must provide the source of electric power for the pump station.	Brandt Mannchen, Sierra Club, June 8, 2011 letter
	Provide a specific schedule for construction.	Rebecca Hensley, TPWD, July 28, 2011
	Under Notes, 2, the proposal states "Actual area required for sediment storage will depend on the final design of the intake structure, pump selection, and sediment extraction system." Are there any pollutants in the sediment? If so, what are those pollutants and what concentrations are they found in?	Brandt Mannchen, Sierra Club, June 8, 2011 letter
Operation	What is the magnitude of impacts that entrainment will have due to the proposal? What mitigation will be required for any environmental impacts?	Brandt Mannchen, Sierra Club July 23, 2011 letter
	The loss of water due to seepage, infiltration, evaporation, and other water losses must be analyzed and estimated in the EIS. This helps determine and reveals the environmental impacts of the proposal as well as the social and financial impacts.	Brandt Mannchen, Sierra Club, June 8, 2011 letter
	I understand there will be a 6-foot-tall chain-link fence running on both sides, north and south, correct? On the corridor?	Fred Majors, property owner, Public Scoping Meeting
	Lighting for on-ground facilities and equipment should be down-shielded to keep light within the boundaries of each site and to reduce disturbance to resident and migratory birds and other resident wildlife.	Stephen Parris, USFWS, May 19, 2010 letter

**Table 3. Comment Summary** 

Resource / Issue	Comment	Commenter	
	What leakage and evaporation will occur due to the use of an open canal? What mitigation will be required for leakage and evaporation?	Brandt Mannchen, Sierra Club, Public Scoping Meeting	
	Sheet 5 of 44, Caper's Ridge Pump Station Site Plan, where will the electrical power come from that runs the proposal? What environmental impacts occur due to the generation of this electrical energy? What direct and indirect air pollution will be emitted by this proposal, including the pumping station?	Brandt Mannchen, Sierra Club, June 8, 2011 letter	
	I also have some concern about the Homeland Security issue of putting a canal right parallel with the road where the public could have access to it, and what other issues could become involved.	Richard Bumstead, property owner, Public Scoping Meeting	
Sustainabil	ity or Quality of Life		
when the properties of the DEIS si	n area is already above its carrying capacity. This is reflected individually and by the following: For wildlife habitat, wetlands acreage is decreasing.  roject description states "sustaining the long-term economic health of the Houston area and surrounding communities" needs to be fully explained. What does ty" really mean in this context? The Houston area is already above its carrying his is reflected individually and cumulatively by the following: er quality, many bayous and other streams exceed their water quality standards. Industry capacity, there are falling groundwater levels in many places, activated faults, sidence.  ace water capacity, overuse of surface water has led to importation of surface water river basins (watersheds).  ected park and ecological lands, Houston is far below standards for park 1,000 people at, noise barriers are being erected on many highways.  Club is very concerned that the project description pre-ordains what the population will ure. The DEIS should reveal what more than doubling the population will mean for the residents, their children, and grandchildren regarding air quality.	Brandt Mannchen, Sierra Club, June 8, 2011 letter	
Water q Light po		lettel	
ozone Natio The DEIS sl given the lin	nal Ambient Air Quality Standard. hould address how much population growth and economic development is sustainable nited water resources that we have. A carrying capacity analysis is needed to ur population and growth limits so that we have a sustainable quality of life.		
metropolitar	roject description states, "sustaining the long-term economic health of the Houston area and surrounding communities" needs to be fully explained. What does ty" really mean in this context? The Houston area is already above its carrying		

**Table 3. Comment Summary** 

The DEIS must address the problem of the Houston area exceeding its carrying capacity and how this relates to sustainability of the area with this proposed project.

The DEIS should state whether the environment will be degraded that we rely on for all of our needs. If this occurs then we degrade our quality of life and reduce the carrying capacity for humans and especially for those who live after us. We reduce their options as we mandate water use now. We bring ourselves closer to ecological overshoot or collapse by not recognizing that humans are animals too and we are dependent on the same ecological principles as every other living organism.

When the project description states "sustaining the long-term economic health of the Houston metropolitan area and surrounding communities" needs to be fully explained. What does "sustainability" really mean in this context? The Houston area is already above its carrying capacity. This is reflected individually and cumulatively by the following:

For water absorption capacity, major floods occur every year.

There are many public policy questions that must be answered by the DEIS. Some of these include:

- 1. What population do we want?
- 2. What population can we handle (so we do not exceed natural carrying capacities)?
- 3. Is growth in population good or bad?
- 4. Do we need growth in population?
- 5. Why do we need growth in population?
- 6. How much population growth should we have?
- 7. What quality of population growth do we want?
- 8. What can we do to reduce population growth?
- 9. Why don't we reduce population growth?
- 10. How much immigration is good?
- 11. How much immigration is bad?
- 12. How can we control population growth?
- 13. How can we implement family planning?
- 14. What level of economic growth do we want?
- 15. What level of economic growth do we need?

Without an explanation in the DEIS on these and other questions, the population projections presented are a fait acompli and Houstonians are not allowed a fair opportunity to voice what they want via the public comment period.

It seems obvious that the long planning time frame for water projects cause projects to be built on speculation. This speculation in population growth and water use will then become fact. The fact that there are existing inter-basin water transfers between the San Jacinto, Brazos, and Trinity Rivers does not mean that this strategy should continue. When a population seeks water outside of the watershed it lives in then it has already exceeded the carrying capacity of that watershed and that population is already greater than it should be.

The human population carrying capacity of the Trinity and San Jacinto River Basins must be revealed in the DEIS, taking into account protecting sensitive areas and ecosystem needs, and then the proposal should reveal whether it exceeds the population projection.

The Sierra Club is very concerned that the project description preordains what the population will be in the future. Population projections are the very foundation of all planning, including water use, in Texas.

When the project description states "sustaining the long-term economic health of the Houston metropolitan area and surrounding communities" needs to be fully explained. What does "sustainability" really mean in this context? The Houston area is already above its carrying capacity. This is reflected individually and cumulatively by the following:

For transportation, congestion is found on most major roads

Brandt Mannchen, Sierra Club, June 8, 2011 letter

**Table 3. Comment Summary** 

Resource / Issue	Comment	Commenter
be in the fut use, in Texa Houston are	Club is very concerned that the project description preordains what the population will ure. Population projections are the very foundation of all planning, including water as. The DEIS should reveal what more than doubling the population will mean for a residents, their children, and grandchildren regarding air quality, water quality, noise, in, traffic congestion, green space and parks, farmland, social services, quality of life,	Brandt Mannchen, Sierra Club, June 8, 2011 letter
Water Supp	oly / Water Quality	
Adequacy a	nd concerns related to the water conservation goal will be provided to Region H.	Scott Jones, Galveston Bay Foundation, May 18, 2010
and any sec area is not f type of water	cation of water pollution from this water conveyance structure, associated structures, condary development that this proposal will promote by providing water in the Houston ound in the public notice. The applicant - ignores and does not quantify the amount and or pollutants that will be generated by the proposal and any secondary development due to making water available.	Brandt Mannchen, Sierra Club, April 30, 2010 letter
final design	s, 2, the proposal states "Actual area required for sediment storage will depend on the of the intake structure, pump selection, and sediment extraction system." Are there its in the sediment? If so, what are those pollutants and what concentrations are they	Brandt Mannchen, Sierra Club, June 8, 2011
structures, a quality impa	Notice provides no quantification of water pollutants from the proposal, associated and induced development due to the provision of water in the Houston area. The water acts of the proposal and the secondary development that may result from the proposal nalyzed and provided in the Public Notice.	letter (also in April 30, 2010 letter)
oxygen, etc	e changes in water quality like turbidity, salinity, alkalinity, conductivity, dissolved ., in any water bodies that are affected by the proposal? What mitigation will be any environmental impacts?	Brandt Mannchen, Sierra Club, July 23, 2011 letter
Wetlands/	Wetland Mitigation	
USFWS cor	nservation easement for mitigation property.	Scott Jones, Galveston Bay Foundation, May 18, 2010
	act logging, request information on the extent of effects to the environment; need for plan to restore lost habitat. Both a reforestration plan and invasive species control	Rebecca Hensley, TPWD, May 26, 2010
generous ar National Wi demonstrab	ed mitigation plan appears to be an offer of straight preservation. While the ratio is and I certainly am supportive of any addition of high quality habitat to the Trinity River Idlife Refuge, straight preservation should not be allowed unless there is a ale, unregulated threat to the aquatic resources to be preserved. Develop information preservation as mitigation option; need information pertaining to demonstrable threat.	Bruce Bodson, Individual, May 19, 2010

**Table 3. Comment Summary** 

Resource / Issue Comment	Commenter
The proposed compensation for the project's unavoidable adverse impacts is the acquisition of an approximately 2,953-acre tract located within the Lower Trinity Floodplain Habitat Stewardship Program acquisition boundary for the TRNWR. It is stated in the Public Notice that the property will be deeded to the USFWS. Please have the applicant provide documentation that the property has been investigated by USFWS and USFWS has agreed to accept the mitigation property for inclusion in the TRNWR. Also, please have the applicant provide any additional details regarding the plan to provide mitigation lift and the responsibility for restoration and enhancement of functional resource values on the proposed mitigation tract.	Charles Mcquire, TCEQ, May 18, 2010 letter
Additional meetings may be needed with the applicant, the applicant's representatives, and the Corps to further discuss project impacts and complete the compensatory mitigation plan.	Charles Mcquire, TCEQ, May 18, 2010 letter
<ul> <li>Compensatory Mitigation: The Service fully supports the proposed mitigation site and current plans to incorporate it as part of the Trinity River National Wildlife Refuge. However, the following recommendations should be incorporated into the mitigation plan:</li> <li>An invasive species control plan should be developed for areas that are proposed to be disturbed by the construction of the pump station, pipeline corridor, transmission line corridor, access roads and any other areas that may be disturbed during construction activities.</li> <li>The property should be transferred to the Trinity River National Wildlife Refuge within 180 days of permit issuance.</li> </ul>	Stephen Parris, USFWS, May 19, 2010 letter
The proposal also does not state how many individual wetlands will be destroyed.	Brandt Mannchen, Sierra Club, April 30, 2010 letter
The mitigation rules in 332.3 go on to state in (c) Watershed approach to compensatory mitigation, (1), "The district engineer must use a watershed approach to establish compensatory mitigation requirements in DA permits to the extent appropriate and practicable.	Brandt Mannchen, Sierra Club, April 30, 2010 letter
The mitigation of wetlands lost due to this proposal and this water conveyance structure, associated developments, and any secondary development that this proposal will promote in the Houston area may be in the public interest if the applicant buys mitigation lands and provides them to the U.S. Fish and Wildlife Service (FWS) and the TRNWR and other appropriate mitigation is required. This cannot be done however [sic] there is no analysis provided to the public and decision-makers which shows how compensation and mitigation ratios were determined and whether this is adequate for the purposes of Section 404 and the mitigation rules that the Corps must use.	Brandt Mannchen, Sierra Club, June 8, 2011 letter (also in April 30, 2010 letter)
Because of the importance of the San Jacinto River watershed to the City of Houston and surrounding communities with regard to water quality and flooding, the mitigation by acquisition of bottomland hardwood forested or riparian wetlands along the San Jacinto River and its tributaries should be accomplished as part of this proposal.	Brandt
Financial assurances have been poorly addressed in the proposal. Under Subpart J - Compensatory Mitigation for Losses of Aquatic Resources, 230.91, Purpose, adequate wetland mitigation requires sufficient financial assurances. Such financial assurances have not been addressed in the Public Notice for this proposal and must be. The public needs this information so it can review, comment on, and understand the full environmental impacts of this proposal.*	Mannchen, Sierra Club, June 8, 2011 letter (*also in April 30,
It is not clear whether the at least 964 acres that will be part of the 300 foot ROW has been mitigated for appropriately in addition to the restoration of watershed, drainage, and hydrological features for streams, flatwoods, swales, sloughs, and other water features that may be affected by this proposal either directly or indirectly.*	2010 letter)

**Table 3. Comment Summary** 

Resource / Issue	Comment	Commenter	
and we sup given to the location and required wit Watershed. River Bottor Consideration functions, a	mland hardwood forested wetlands in the Trinity River Floodplain as mitigation is good port the acquisition of the almost 3,000 acres of Trinity River Floodplain that will be FWS for management as part of the TRNWR. But to ensure that out-of-ecosystem lout-of watershed mitigation is fully provided for additional mitigation should be hin the San Jacinto River Watershed in addition to that proposed for the Trinity River Such an action ensures that protection of a sustainable portion of the San Jacinto mland Ecosystem is assured. After all, under 332,1(a), Purpose and General ons, it states that the rules must "provide for regional variations in wetland conditions, and values" and this is done when mitigation is conducted in the Trinity River and San er Watersheds. *	r s,	
support) for Watershed	Club recommends that the same 10:1 wetlands mitigation ratio be used (which we direct and indirect environmental impacts for mitigation in the San Jacinto River as was used for the Trinity River Watershed. This is predicated on the increasing rarity and hardwood forested and riparian wetlands due to their significant losses since pre-imes.*	Brandt Mannchen, Sierra Club, June 8, 2011	
wetlands ful of Cedar Ba required by	nat some of the streams that may be affected by alterations in hydrology, drainage, and notions include Luce Bayou, Cedar Bayou, Long John Creek Gillen Bayou, East Fork you, Tanner Bayou, Davis Bayou in addition to adjacent and nearby flatwoods. As the Compensatory Mitigation for Losses of Aquatic Resources, 33 CFR Part 332, rules, pration via rehabilitation of ecological function is needed as mitigation for this proposal.	letter (*also in April 30, 2010 letter)	
ecosystems degradation	Water Act means anything then non-water dependent actions that destroy natural and their birth places, wetlands, should not be approved for destruction and via Section 10/404 permits. What is sacred and how can the natural water cleansing eams be protected if the wetlands along the stream are destroyed or degraded? *		
that the env Sheet 11 of	ps consider an alternative that places the two pipelines under the ROW access road so ironmental impacts to wetlands that lie both inside and outside the ROW are reduced? 44 documents that Wetlands G, F, and H can be avoided if the pipelines are placed OW access road.		
	OW access road is not water dependent, what will be done to minimize, by the impacts of the road (for instance, spanning the wetlands) or to mitigate for those		
	roject Description, 3.1.1 Wetland Systems, all nonjurisdictional wetlands must be did their area determined and the DEIS must describe what will happen to each of these	Brandt Mannchen,	
is not clear	4, Project Planview and Wetland Impacts, Wetland Name 1-7, says Trinity River. What by this designation is whether this wetland deals with the river itself or also the riparian is along the river.	Sierra Club, June 8, 2011 letter	
Is the non-w	the Resource/ Wetland Type is named Forested Mosaic, what exactly does this mean? vetland part of Forested Mosaic treated as a wetland or has it been removed so that it ted under the Area column? How does the non-wetland part of Forested Mosaic affect part?		

**Table 3. Comment Summary** 

Resource / Issue	Comment	Commenter
and Wetland Y, W, AA, G 22, 7-01, 7-1 66, 7-68, 7-25, 8-26, 8-2 41-01, 41-0 50-2, 51-1, If so, how m impacts will wetlands are this proposa	ets 9, 10, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 28, 29, 30, and 32 of 44, Project Planview Wetland Impacts, do any of Wetlands A, B, K, M, N, 0, Q, S, U, 6.22, 6.24, 6.26, 6-27, AA, X, //, AA, GG, HH, II, 6-01, 6-04, 6-05, 6-06, 6-10,6-12, 6-14, 6-15, 6-16, 6-17, 6-18, 6-19, 6-20, 6-7-01, 7-04, 7-07, 7-11, 7-13, 7-19, 7-22, 7-23, 7-31, 7-44, 7-49, 7-54, 7-58, 7-60, 7-62, 7-64, 7-7-68, 7-72, 7-73, 7-76, 7-77, P09-01, P10-01, 8-05, 8-09, 8-11, 8-16, 8-18, 8-19, 8-23, 8-24, 8-3-26, 8-28, P12-01, P12-02, P14-01, P16-01, P17-01, P17-02, P19-01, P19-02, P22-01, 14-1, 11, 41-03, 41-05, 41-06, 41-04, 42-01, 42-03, P43-01, P43-02, 43-1, 43-6, 43-7, 43-11, 44-8, 15, 51-1, 52-2, 52-3, 52-6, 52-8, 52-10, 52-11, 52-13, and 54-1 lie outside the ROW boundaries? how much of each wetland (area) lies outside the ROW boundaries? What environmental acts will occur to remnant wetlands that lie outside the ROW boundaries when the rest of the lands are destroyed? The Corps should state that 267 individual wetlands will be destroyed by proposal. The public needs this information so that it can review, comment on, and understand for the environmental impacts of this proposal.	
affect this w	H, which lies outside where the pipeline will be buried, what activities in the ROW may etland and how can the environmental impacts of those activities be eliminated or mitigation measures)? What kinds of environmental impacts may affect Wetland H?	June 8, 2011 letter
that lie withi	nmental impacts will mowing have over the entire length of the proposal on wetlands in the ROW but are not destroyed by construction (like Wetland H)? What mitigation will be implemented that reduce mowing impacts on wetlands?	
ecosystems degradation	Water Act means anything then non-water dependent actions that destroy natural and their birth places, wetlands, should not be approved for destruction and via Section 10/404 permits. What is sacred and how can the natural water cleansing eams be protected if the wetlands along the stream are destroyed or degraded?	
Hydrology		
Fencing det of siphons.	ails are requested including breaks in fencing and at the mitigation property and in area	Stephen Parris, USFWS (also in May 19, 2010 letter)
alternatives	interested in what happens depending on where it hits Luce Bayou as far as those two that hit Luce Bayou. And in those existing ecosystems, how it's going to change that g-and-falling system to a constant-water-level kind of system.	Brandt Mannchen, Sierra Club, Public Scoping Meeting
Trinity Bay;	flow regime and potential impacts to sedimentation of the Trinity River Delta; salinity of and altered flooding hydrology of cypress swamps and other forested wetlands along liver and the Wallisville area.	Rebecca Hensley, TPWD, July 28, 2011
developmer Harris Coun flows, drains will be affect	that this water conveyance structure, associated developments, and any secondary at that this proposal will promote by providing water to the Houston area (like northern ty, southern Montgomery County, and other counties farther west) will alter overland ages, and flatwoods. How much alteration occurs, how much area is affected, how it ted, and how wetlands outside the ROW (north, south, east, and west) and their and drainage will be affected is not stated.	Brandt Mannchen, Sierra Club, April 30, 2010 letter

**Table 3. Comment Summary** 

Resource / Issue	Comment	Commenter	
Some impacts (of the Luce Bayou Alternative) could include scouring of banks, soil erosion, sedimentation of aquatic habitats, submergence of habitats, artificially keeping water levels high in Luce Bayou and therefore altering the hydrology, hydro-period or seasonality, and frequency of inundation, etc.*			
The Corps should understand that this proposal is potentially a 26.5 mile hard structure that could alter regionally hydrology over a large area.*			
How to address drainages, overland flow through flatwoods, and other poorly drained areas due to this proposal and its cumulative impacts as well as protecting the ecological and hydrological connections and benefits they have needs to be addressed for both the San Jacinto River Watershed and the Trinity River Watershed.			
outside the I not stated. It drainage, an	Ilteration occurs, how much area is affected, how it will be affected, and how wetlands ROW (north, south, east, and west) and their hydrology and drainage will be affected is appears that some of the streams that may be affected by alterations in hydrology, id wetlands functions include Luce Bayou, Cedar Bayou, Long John Creek Gillen Fork of Cedar Bayou, Tanner Bayou, Davis Bayou in addition to adjacent and nearby	in April 30, 2010 letter)	
wetlands fur Cedar Bayor required by	at some of the streams that may be affected by alterations in hydrology, drainage, and actions include Luce Bayou, Cedar Bayou, Long John Creek Gillen Bayou, East Fork of Luce, Tanner Bayou, Davis Bayou in addition to adjacent and nearby flatwoods. As the Compensatory Mitigation for Losses of Aquatic Resources, 33 CFR Part 332, rules, tration via rehabilitation of ecological function is needed as mitigation for this proposal.	Brandt Mannchen, Sierra Club, April 30, 2010 letter	
whether the	potential secondary impacts to all habitats as a result of the proposed project including canal will prevent hydraulic movement of water across the landscape from the north anal to the south side of the canal.	Rebecca Hensley, TPWD, July 28, 2011	
and someting if and whe	we do live on FM 321, and during our normal years of rain, the State ditches will fill up the flood my my front yard. So when the canal comes through if it comes through n it does on the proposed site, my first concern is, is drainage for the State; and then perty drains to the south, which will be the canal side.	Fred Majors, property owner, Public Scoping Meeting	
Climate Cha	ange		
	proposal be affected by or exacerbate climate change? edone to create more resilient and resistant habitats and ecosystems?	Brandt Mannchen, Sierra Club,	
What can be	done to assist plants and animals so they can adapt to climate change?		
	is proposal do to reduce C02 or other greenhouse gas emissions within the area roposal has environmental effects?	April 30, 2010 letter	
about how the climate chart and make it ecosystems.  1. How will the canonic what can where this	roject Description, Summary, the Corps should require that the DEIS have an analysis his proposal will be affected by climate change or affect ecosystems' ability to adapt to age and a plan to deal with these effects. Climate change will alter existing ecosystems more difficult for plants and animals to adapt successfully to these changed. The analysis and plan should address questions like: his proposal be affected by or exacerbate climate change? be done to create more resilient and resistant habitats and ecosystems? this proposal do to reduce CO <sub>2</sub> or other greenhouse gas emissions within the area is proposal has environmental effects? 4. What can be done to assist plants and o they can adapt to climate change?	Brandt Mannchen, Sierra Club, June 8, 2011 letter	

**Table 3. Comment Summary** 

Resource / Issue	Comment	Commenter		
ecological re This plan wo environment and ecologic to climate ch The plan wo 1. Protecting effects. 2. Reducing effects. 3. Restoring environm 4. Using nat instances 5. Acquiring where thi 6. Intervening	hould require the preparation and include in this permit proposal a climate change esilience and resistance plan as part of mitigation required for environmental impacts, ould assess the biological and ecological elements in the area where this proposal has all effects and the effects that climate change has had and will have on these biological call elements. The plan would also assist plants, animals, and ecosystems in adapting lange and would require monitoring of changes and mitigation measure effectiveness, uld be based on:  If existing functioning ecosystems in the area where this proposal has environmental stressors on the ecosystems in the area where this proposal has environmental natural functioning ecological processes In the area where this proposal has ental effects.  If existing functioning ecological processes In the area where this proposal has environmental effects.  If existing functioning ecological processes In the area where this proposal has environmental effects.  If existing functioning ecological processes In the area where this proposal has environmental effects, in most as a proposal has environmental effects.  If existing functioning ecological processes In the area where this proposal has environmental effects, in most as a proposal has environmental effects.  If existing functioning ecological processes In the area where this proposal has environmental effects.  If existing functioning ecological processes In the area where this proposal has environmental effects.	Brandt Mannchen, Sierra Club, July 23, 2011 letter (also in April 30, 2010 letter)		
	nate change affect all of the above issues and concerns? What mitigation will be any environmental impacts?	Brandt Mannchen, Sierra Club July 23, letter		
Aquatic/ Terrestrial Species and Associated Habitat Impacts				
alkalinity. It's	thic invertebrate communities, changes in conductivity, turbidity, salinity, and see real important that we do monitoring to see what happens even if this gets approved. To some pre-year monitoring and then we do some post-operational monitoring, and ucial.	Brandt Mannchen, Sierra Club, Public Scoping Meeting		
	is a real important problem as far as aquatic species being entrained on those big nto the pipeline systems.	Brandt Mannchen, Sierra Club, Public Scoping Meeting		
upland, wetl associated v (the degrees provided at t	e not been addressed in the proposal. Under 33 CFR part 332, buffers, which include and, and or riparian areas that protect and or enhance aquatic resource functions with wetlands, rivers, streams, etc., must be provided for as well as functional capacity an area of aquatic resource performs a specific function). Although uplands are the mitigation site at the Trinity River, nowhere else are they mentioned or mitigation he Public Notice and none have been provided for in the San Jacinto River	Brandt Mannchen, Sierra Club, June 8, 2011 letter (also in April 30, 2010 letter)		
dated May 2 mitigation tra component	Int should provide a restoration plan as TPWD previously recommended in a letter 16, 2010. TPWD recommended the applicant restore logged habitat on the Harrison fact which included a reforestation component and an invasive plant species control to include, but not be limited to Chinese tallow ( <i>Triadica sebifera</i> ) and deep-rooted certls elllreriam(s). TPWD stands by our previous recommendation.	Rebecca Hensley, TPWD, July 28, 2011 letter (also in May 26, 2010 letter)		

**Table 3. Comment Summary** 

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to your office native speci- freshwater n gravid femal make it to th Jacinto Rive where inocu	still stands by its previous comments that were made in our letter dated May 19, 2010 e. However, we do have additional concerns on how this project is going to affect the es of freshwater mussels that occur in the San Jacinto River basin. The distribution of nussels depends heavily on their fish hosts. If fish that have been inoculated by a le from the Trinity River basin move through the Luce Bayou Transfer project and see San Jacinto River basin, then a species that may or may not be native to the San er basin could be introduced. The Service is also concerned about the reverse scenario lated fish from the San Jacinto basin move to the Trinity River basin. There is a set introduced mussel species can out compete native mussel species within a river	Charrish Stevens, US Fish and Wildlife Biologist, July 27, 2011
	pacts, including sedimentation, to native freshwater mussels and their habitats in the , San Jacinto River, Luce Bayou, Lake Houston, and any tributary streams of those .	Rebecca Hensley, TPWD, May 28, 2011
to the consti	Club is concerned about fragmentation of habitat and increased road kill of wildlife due ruction of this water conveyance structure, associated structures, and any secondary at that this proposal will promote by providing water (with additional roads and possible the Houston area.	Brandt Mannchen, Sierra Club, April 30, 2010 letter
	will dredging of sediments to be used for the intake structure have on fish and other anism spawning areas, fish cover areas, and other fish habitat?	Brandt Mannchen, Sierra Club, June 8, 2011 letter
evaluation, a	Project Description, 3.1 Project Components, the DEIS must address, via analysis, and assessment, how fragmentation of the landscape will affect each different species d animals (both vertebrate and invertebrate), streams, and ecosystems.	Brandt Mannchen, Sierra Club, June 8, 2011 letter
	f impingement and entrapment will occur at the intake points? c species will be affected?	Brandt Mannchen, Sierra Club, June 8, 2011 letter
Entrainment	and impingement of fish and other wildlife at pump station control.	Scott Jones, Galveston Bay Foundation, May 18, 2010
	n-habitat relationships be affected by the proposal? What mitigation will be required for mental impacts?	Brandt Mannchen, Sierra Club July 23, 2011 letter
Fish-habitat watersheds'	relationships, are they going to be affected by transferring the water between the two?	Brandt Mannchen, Sierra Club, Public Scoping Meeting

**Table 3. Comment Summary** 

Resource / Issue	Comment	Commenter
they've talke from a reduc	going to do to the Trinity River delta, including the some of the aquatic plants that ed about using as indicator species for fresh-water inflows. And what's going to happen ction of sediments, organic matter and nutrients for oysters and other things that live in versus coming in on the San Jacinto River.	Brandt Mannchen, Sierra Club, Public Scoping Meeting
	neries in Lake Houston, Luce Bayou, Trinity River, and San Jacinto River, and any of ter bodies in this comment letter be affected? What mitigation will be required for any tal impacts?	Brandt Mannchen, Sierra Club, July 23
	al patterns of stream flows affect fishes that have evolved in seasonal low-flow or high- change? What mitigation will be required for any environmental impacts?	Brandt Mannchen, Sierra Club, July 23
Will there be environmen	e shifts in benthic invertebrate communities? What mitigation will be required for any tal impacts?	Brandt Mannchen, Sierra Club, July 23
minimize po	c resources cannot be avoided, appropriate and practicable steps should be taken to tential adverse impacts (30 TAC §279.II(c)(2)). Please provide more detailed on what options were considered to minimize impacts and why they were eliminated.	Charles Mcguire, TCEQ, May 18, 2010 letter
The potentia	al for additional impacts to fish and wildlife habitat.	Rebecca Hensley, TPWD, July 28, 2011
	nitetail deer and this project will cut off 490 acres of our land. The impact on wildlife – unting on our property will be impacted greatly.	Floyd and Gail Page, property owners, July 25, 2011
Potential im long canal).	pacts to wildlife movement due to a continuous, east-west barrier (i.e., the 23.5 mile	Rebecca Hensley, TPWD, July 28, 2011
incorporatio	nined that the proposed project may prevent wildlife movement, evaluate the n of wildlife crossings into the project plans to facilitate north-south movements by eptiles, and amphibians away from road crossings.	Rebecca Hensley, TPWD, July 28, 2011
	ier and wildlife movement hindrance related to canal across Liberty County; wildlife nould be integrated into project plans (away from roads).	Rebecca Hensley, TPWD, July 28, 2011
	concerns on wildlife and the buildup of mosquitoes along the canal and creating more r people that live up and down the canal.	Mr. Fred Majors, property owner, Public Scoping Meeting

**Table 3. Comment Summary** 

Resource / Issue	Comment	Commenter
All utility lines, including electrical transmission lines, associated with this project should be included in the project description. Habitat impacts associated with utility corridor installation should be determined and included in the project plans. Alternatives should be considered for power lines, such as underground installation, to decrease the threat to migratory and resident birds. Migratory birds (e.g., waterfowl, shorebirds, passerines, hawks, owls, vultures, falcons) are afforded protection under the Migratory Bird Treaty Act (40 Stat. 755;16 USC. 703-712).		
Alternatives	acts of utility corridor installation should be determined and included in project plans. should be considered for power lines including underground installation to minimize gratory and resident bird species.	2010 letter
wildlife (vert mitigation m effectivenes	Project Description, 3.1.1 Wetland Systems, the DEIS must address how each type of ebrate and invertebrate) will be able to cross the proposed ROW and to what degree leasures will work. Monitoring of these mitigation measures to determine their is and readdressing monitoring and mitigation measures to make sure that they are wildlife crossings must be required.	Brandt Mannchen, Sierra Club, June 8, 2011 letter
There is a d	ry land <b>taprin</b> [ <i>sic</i> ] turtle that is found on our land. The wildlife impact is unknown.	Floyd and Gail Page, property owners, July 25, 2011
Invasive Sp	pecies	
Enhanceme	ent of the mitigation property through the removal of invasive species.	Scott Jones, Galveston Bay Foundation, May 18, 2010
	lan should include invasive species control for any areas disturbed by proposed and transfer of property to NWR within 180 days of receipt of permit.	Stephen Parris, USFWS, May 19, 2010
(plant and a measures th mitigation m	Project Description, Land Use Compatibility, the DEIS must address exotic species nimal); their potential introduction; their environmental impacts; the mitigation nat could be used to address environmental impacts if exotic species are introduced; teasures for the proposal which will prevent introduction of exotics; and the s of each mitigation measure.	Brandt Mannchen, Sierra Club, June 8, 2011 letter

**Table 3. Comment Summary** 

Resource / Issue	Comment	Commenter
are in Lake flows into La introductions Trinity River from Lake T Hubbard, wh that Zebra meradication of mortality foll Grove Creel (e.g., water considered a lf you need either Howa whom I have because inv	Texoma and Sister Grove Creek. Sister Grove Creek has a small population and it alke Lavon and forms the upper Trinity River Basin. We have also had confirmed so of Zebra mussels into Lakes Lavon and Ray Hubbard, both of which are on the basin. Both of these introductions were via contaminated boats that had been moved exoma. A single living Zebra mussel was found on the boat ramp at Lake Ray nich presumably fell off the boat that was launched, but to date we have no indication hussels have become established in either Lake Ray Hubbard or Lavon. Our efforts on Sister Grove Creek last fall were not 100% effective; we documented some owing our treatments but we also found living Zebra mussels still present in Sister X. In addition to Zebra mussels the potential spread of invasive aquatic vegetation hyacinth, giant salvinia and water lettuce) via this water transfer needs to be as well. We know all 3 of these species and others are found in the Trinity River basin. more info in regards to invasive aquatic vegetation I would recommend contacting and Elder (409-384-9965), Mark Webb (979-272-1430) or Earl Chilton (512-389-4652) included in this email. Since Zebra mussels are present in the Trinity River Basin and asive aquatic vegetation is also found in the vicinity of this water transfer I think these ed to be fully addressed in the EIS.	Brian Van Zee, TPWD, May 26, 2010
has been co Zebra muss attach in larg native muss interferes wi mussels by mussels ma filter the spe reproductive streams. Zel We believe to introduction Currently, the throughout a Corps during	ay 19, 2010, letter, we have learned a small population of the invasive Zebra mussel nfirmed in the upper Trinity River basin in Grayson County, Texas. A single live adult el has been found in Lake Ray Hubbard, also in the Trinity River basin. Zebra mussels ge numbers to the shells of live native mussel, and are implicated in the loss of entire el beds. This invasive species impedes locomotion (both laterally and vertically), the normal valve movements, deforms valve margins, and suffocates and starves native depleting water of oxygen and food. Heavy infestations of Zebra mussels on native y overly stress the animals by reducing their energy stores. Zebra mussels may also rm and possibly glochidia of native mussels from the water column, thus reducing a potential. The Zebra mussel has eliminated native mussel fauna in some smaller or a mussels also attach to inanimate objects and can clog water intake pipelines. The proposed Luce Bayou Interbasin Transfer Project would provide a conduit for the of Zebra mussels from the Trinity River system into the San Jacinto River basin. Here are no economically feasible methods to prevent Zebra mussels from spreading a river system once the species is introduced. However, the Service will work with the getra mussels into the San Jacinto River basin.	Dr. Benjamin Tuggle, Regional Director, U.S. Fish and Wildlife Service, July 21, 2011
Lake Housto	transfer of exotic species, both terrestrial and aquatic, be affected by the proposal in on, other lakes and ponds, Galveston Bay, other bays, Trinity River, San Jacinto River, er streams and tributaries of the water bodies mentioned? What mitigation will be any environmental impacts?	Brandt Mannchen, Sierra Club July 23, 2011 letter
Tallow, exot	es of concern include Zebra mussels, hydrilla, water hyacinth, giant Salvinia, Chinese ic privet species, and many others. One mitigation measure that could be used is to c Chinese Tallow trees in the Wallisville Area and in Trinity River National Wildlife erties.	Brandt Mannchen, Sierra Club July 23
the San Jac freshwater n watershed; a	potential to transfer Zebra mussels ( <i>Dreissella polymorpha</i> ) from the Trinity River into into River watershed via the proposed project; assess potential impacts to native mussels and fish if the Zebra mussel is introduced into the San Jacinto River and evaluate potential control or containment mechanisms that can be implemented to ra mussel transfer.	Rebecca Hensley, TPWS, July 28, 2011
River waters	potential introduction of non-native invasive aquatic organisms into the San Jacinto shed via the proposed project including, but not limited to, giant salvinia (Salvillia devaluate mechanisms that can be implemented to prevent their transfer.	Rebecca Hensley, TPWS, July 28, 2011

**Table 3. Comment Summary** 

Resource / Issue	Comment	Commenter		
The introduction of the invasive Zebra mussel ( <i>Dreissena polymorpha</i> ) is a concern. Zebra mussels were discovered in Texas waters on April 2009. Since the initial discovery of Zebra mussels in Texas, additional live specimens have been reported in Lake Texoma on the Red River, where they are now believed to be well established. Later that year, a small confirmed population was found in West Prong Sister Grove Creek in the upper Trinity River basin in Grayson County, which is approximately 388 yards downstream of the Lake Texoma Water transfer pipe. West Prong Sister Creek flows into Lake Lavon and is in the headwaters of the vast Trinity River basin. Further downstream of this lake, a single live adult Zebra mussel was found in Lake Ray Hubbard, which is also in the headwaters of the Trinity River basin. Because Texas has many interbasin water transfer pipelines, the spread of Zebra mussels statewide is in the foreseeable future if they become well established within the Trinity River basin.				
species. Zel implicated ir and verticall suffocates a Heavy infestheir energy mussel s from the Zebra mussel fauntinanimate of The Luce Baspecies from mussels. To	p(9) reviewed in detail the mechanisms by which Zebra mussels affect native mussels are mussels attach in large numbers to the shells of live native mussels and are in the loss of entire native mussel beds. This fouling impedes locomotion (both laterally y), interferes with normal valve movements, deforms valve margins, and essentially and starves native mussels by depleting the surrounding water of oxygen and food. It is taken the start of estimated the surrounding water of oxygen and food. It is taken the water column, thus reducing reproductive potential (Vaughan 1997). Essentially, ussel out competes all native mussels; therefore, they have virtually eliminated native as in smaller streams elsewhere (Martel et al. 2001). Zebra mussels also affect opects such as, pipelines by attaching to the insides and clogging them up.  Tayou Interbasin water transfer project has the potential to further spread this invasive in the Trinity River basin to the San Jacinto River basin, which is currently free of Zebra date, there are no known economically feasible alternatives to prevent the spread of els involving water transfer preventative measure is to not allow water transfer from	Charris Stevens, U.S. Fish and Wildlife Service. July 21, 2011		
	ecies control plan requested including long-term (10 year) controls for relatively areas.	Stephen Parris, USFWS, May 19,		
fisheries in l	sted in what this may or may not do to the fisheries of Lake Houston, as well as the Luce Bayou. In particular in exotic plant and animal species that could be introduced two water systems, the two watersheds.	2010 letter Sierra Club Public Scoping, Brandt Mannchen		
Surface Wa	ter Resources			
	ic impacts will occur on Lower Luce Bayou, the mouth of Luce Bayou, and the Lake Houston? What mitigation will be required for any environmental impacts?	Brandt Mannchen, Sierra Club July 23, 2011 letter		
implementat	mitigation be required? The Sierra Club supports, as a mitigation measure, the tion of the 2008 wetlands mitigation regulations for the mitigation of streams that are in maged or degraded by the proposal.	Brandt Mannchen, Sierra Club July 23, 2011 letter		

**Table 3. Comment Summary** 

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	12, 13, and 32 of 44 show that Drainages CC, P, X, BB, 52-1, and 53-1 are crossed. ere is no documentation which tells a person what the name of the drainage is.	Brandt Mannchen, Sierra Club, June 8, 2011 letter
	of streams that will be crossed must be revealed, along with their ecological and naracteristics and how these will be affected by the proposal.	Brandt Mannchen, Sierra Club, June 8, 2011 letter
	thdrawal of water to the Trinity River downstream of the pump station diversion point; hange to the system should be evaluated as well as the effect of the project on aquatic	Rebecca Hensley, TPWD, May 26, 2010
So I grew up when it's no and water is	Liberty, Texas and Dayton, but I've lived in Dayton since '88 and I grew up in Liberty. o on the Trinity River, and I know how the Trinity River will rise, and also, there's times t very there's not much water in it, as a lot of you know. So when the canal is built being pulled out of the Trinity, does the City of Houston have the right to absolutely nity River and I could walk across the river with no water in it?	Fred Majors, property owner, Public Scoping Meeting
Threatened	and Endangered Species	
Potential im habitats with	pacts to all federal and state-listed rare, threatened, and endangered species and their nin a 5-mile vicinity of the project.	Rebecca Hensley, TPWD, July 28, 2011
Floodplains	s/ Riparian Habitat	
seasonality	roject Description, Site Analysis and Site Description, the DEIS must discuss how of water, availability of water in the backwaters, flora, fauna, cypress regeneration, I flood patterns will be affected by the proposal.	Brandt Mannchen, Sierra Club, June 8, 2011 letter
Faucet Lake	Jacinto River, how would the riparian and floodplain area be affected (Rickett Lake, e, Muleshoe Lake, McCracken Lake, George White Lake, West Camp Lake, Bird Lake, e, Lake Sandy, and Grennel Slough).	Brandt Mannchen, Sierra Club July 23, 2011 letter
Erosion/Se	dimentation	
	Jacinto River, how would erosion of habitats and back bays (Scott Bay, Tabbs Bay, Bay and bird islands) where the San Jacinto River flows into Galveston Bay be	Brandt Mannchen, Sierra Club July 23, 2011 letter
of Lake Hou	e potential to cause increased sedimentation near the discharge point in the upper end aston. If that potential does exist, evaluate the impacts on fish, fish habitat, and fishing in upper Lake Houston from sedimentation.	Rebecca Hensley, TPWD, July 28, 2011
Sheet 8 of 44, Caper's Ridge Pump Station Slope Protection Alternative, what type, and amount of erosion occur at the Trinity River intake structure?		Brandt Mannchen, Sierra Club, June 8, 2011 letter

**Table 3. Comment Summary** 

Resource / Issue	Comment	Commenter
Sedimentati	on and erosion, how that's going to be affected.	Brandt Mannchen, Sierra Club, Public Scoping Meeting,
implications	dimentation and erosion be affected by the proposal? What are the hydrological for land use due to the proposal? What mitigation will be required for any tal impacts?	Brandt Mannchen, Sierra Club July 23, 2011 letter
opening of I	, you know, how that bigger flow is going to affect both Luce Bayou as well as the Luce Bayou to the shoreline of Lake Houston. And what kind of mitigation could be or any sort of those impacts.	Brandt Mannchen, Sierra Club, Public Scoping Meeting
Our land that is being taken by CWA is the highest part of our property. It is the creek between the watershed of the Trinity and San Jacinto river. We are very concerned about how this will impact flooding.		Floyd and Gail Page, property owners, July 25, 2011
Instream F	ows/Freshwater Inflows	
We're also concerned about how salinity will change due to that reduction in flows down the Trinity River. What does that mean? Is it going to make it more salty, and therefore, the oyster drills get in and do more damage to the oysters?		Brandt Mannchen, Sierra Club, Public Scoping Meeting
Will more saltwater intrusion occur in the Trinity River? Will the saltwater intrusion be more severe? What will occur to the Wallisville Area if the Wallisville Dam must be used more frequently to prevent more frequent instances of saltwater intrusion? What mitigation will be required for any environmental impacts?		Brandt Mannchen, Sierra Club, July 23, 2011 letter
There's going to be a change in the location of most of the water that comes into Galveston Bay with the completion of this project. Most of the water now comes down the Trinity River versus the San Jacinto River. Well, we're going to take a good portion of the Trinity River water and route it down the San Jacinto River. So questions are: What is this going to do to the bottomland hardwoods in the Trinity River as far as seasonal drying and wetting?		Brandt Mannchen, Sierra Club, Public Scoping Meeting
The EIS must clearly state what the conveyance water volume will be and then determine the environmental impacts that this amount of diverted water will have on instream flows, Galveston Bay Estuary, a portion of the Galveston Bay Estuary (for example, Trinity Bay), and the landscape /ecosystems in the watersheds that will provide or receive this water.		Brandt Mannchen, Sierra Club, June 8, 2011 letter

**Table 3. Comment Summary** 

Resource / Issue	Comment	Commenter
inflow into G gallons/day change in flo Trinity Bay; t Refuge and Mac Lake, L Lake, Mayes Red Bayou, Bayou, Big I organic matt	proposal affect the change in freshwater inflows into Galveston Bay? Currently, most alveston Bay comes from the Trinity River. With the proposal about 400-500 million (MGD) of inflow will be diverted from the Trinity River to the San Jacinto River. This ow regime could affect the sedimentation of the Trinity River Delta; the salinity of the flooding/drying of bottomland hardwood forests (Trinity River National Wildlife other similar forests) and cypress swamps (Lake Charlotte, Mud Lake, Miller Lake, ake Pass) along the Trinity River and the Wallisville Area (Old River, Lost River, Lost Lake, Round Lake, Old River Lake, Mesquite Pond, Dunn Lake, Lawrence Lake, Jacks Pass, Blind Bayou, Smith Bayou, Southwest Pass, Dunn Bayou, Lone Island Hog Bayou); aquatic plants like Wild Celery; oyster growth and production (reduced ter, nutrients, and sediments); and oyster disease, parasites, and predators in Trinity intigation will be required for any environmental impacts?	Brandt Mannchen, Sierra Club, July 23, 2011 letter
and Trinity E	pacts to aquatic/estuarine organisms and aquatic/estuarine habitats in the Trinity River Bay due to hydrologic changes associated with water withdrawal from the Trinity River-stream flows in the river and reduced freshwater inflows into the bay).	Rebecca Hensley, TPWD, July 28, 2011,
	pacts to oyster health (disease, parasites, predators), growth, and production due to ity regimes (concentration and duration).	Rebecca Hensley, TPWD, July 28, 2011
	quatic resource of the Trinity Bay and Galveston Bay resulting from a reduction of ows in the river and into Trinity Bay.	Bruce Bodson, Individual, May 19, 2010
	ne transfer of 400,000 acre feet per year of water to the Galveston Bay system, nd considered during development of mitigation plan.	Bruce Bodson, Individual, May 19, 2010
	duction of freshwater inflows from the Trinity River basin into downstream bays and econdary, cumulative, secondary effects of such a reduction and loss are requested.	Bruce Bodson, Individual, May 19, 2010
they've talke	going to do to the Trinity River delta, including the some of the aquatic plants that about using as indicator species for fresh-water inflows. And what's going to happen ction of sediments, organic matter and nutrients for oysters and other things that live in tersus coming in on the San Jacinto River.	Brandt Mannchen, Sierra Club, Public Scoping Meeting
	mpacts on freshwater inflows to Galveston Bay and instream flows in the Trinity River of the diversion point should be addressed.	Scott Jones, Galveston Bay Foundation, May 18, 2010

**Table 3. Comment Summary** 

Resource / Issue	Comment	Commenter
	3-3 standards for freshwater inflows to Galveston Bay and for instream flows for the to be developed by July 2011.	Scott Jones, Galveston Bay Foundation, May 18, 2010
Interbasin	Transfer/ Ecological Considerations	
what their p	Notice does not state what ecosystems are found within this length of Luce Bayou, resent condition is, what their condition will be after the proposal is built, and what the tal impacts are of putting huge quantities of water into an existing natural stream (Luce native).	Brandt Mannchen, Sierra Club, June 8, 2011 letter
communities ponds, Galv tributaries o phytoplankt plants and a	rinity River and San Jacinto River do not have identical floras. faunas, and living is how will the native aquatic and terrestrial systems in Lake Houston, other lakes and reston Bay, other bays, Trinity River, San Jacinto River, and any other streams and if the water bodies mentioned be affected by the transfer of disease vectors, parasites, on, zooplankton, invertebrates, fish, terrestrial and aquatic plants, and any other native animals between the Trinity River and San Jacinto River Watersheds? Will community ation occur? What mitigation will be required for any environmental impacts?	Brandt Mannchen, Sierra Club July 23, 2011 letter
Are we going to get transfer of disease vectors, parasites, phytoplankton, zooplankton, invertebrates, fish, terrestrial, aquatic plants? There are a lot of things that could happen. So we need to look at that carefully and say You know, if these are potential things, we need to analyze that, and then say how we could mitigate that.		
Enclosed is an article entitled "Inter-basin Water Transfer: Ecological Concerns," by Michael R. Meador. This article may assist the Corps when preparing the DEIS and conducting the appropriate analysis, evaluation, and assessment for the proposal.		Brandt Mannchen, Sierra Club July 23, 2011 letter – Attached information
For the San	For the San Jacinto River, how would the sedimentation of the Houston Ship Channel be affected?	
Land Use/	Property Values	
The Corps must acknowledge and analyze the economic impacts that this water conveyance structure, associated structures, and any secondary development that this proposal will promote by providing water in the Houston area has in relation to environmental impacts. This includes the qualitative and quantitative impacts on flooding and water quality in the area including long-term environmental impacts that this proposal will have.		Brandt Mannchen, Sierra Club, April 30, 2010 letter
Page A-S, Project Description, Land Use Compatibility, the DEIS must compare the proposal to the canal and drainage network for irrigation or draining of agricultural fields to document the statement that "LBITP canal would be a feature on the landscape somewhat similar to the existing agricultural ditches and canals that currently exist" with regard to environmental impacts and characteristics.		Brandt Mannchen, Sierra Club, June 8, 2011 letter

**Table 3. Comment Summary** 

Resource / Issue	Comment		
The DEIS should reveal what more than doubling the population will mean for Houston area residents, their children, and grandchildren regarding land use and farmland.			
Page A-S, Project Description, Land Use Compatibility, the DEIS must compare the proposal to the canal and drainage network for irrigation or draining of agricultural fields to document the statement that "LBITP canal would be a feature on the landscape somewhat similar to the existing agricultural ditches and canals that currently exist" with regard to environmental impacts and characteristics.			
For farmland	For farmland, farmland use and acreage is decreasing in most counties		
I also have concerns on the depreciation of my home, and the and what it does to my property value. Liberty County Appraisal District just went up – ooh, from around \$4,500 an acre two years ago to approximately \$9,700 an acre. So what's it going to do to my property? What's it going to do to my home? Because I will live my home on the south side of my home will be 200 foot from the water. So what will it do to the depreciation of my home?		Fred Majors, property owner, Public Scoping Meeting	
The proposed canal routing borders the east side of my property for approximately 7,000 feet. It's proposed to take all my road frontage on the east side of my properties, so I have no access. I've got a total of 1,484 acres in there, and I live on that site.		Richard Bumstead, property owner, Public Scoping Meeting	
Recreation	What is the impact on boating, canoeing, and kayaking? How will this type of environmental damage be mitigated?	Brandt Mannchen, Sierra Club, June 8, 2011 letter	
	Page A-4, Project Description, 3.1.5 Lake Houston Near Luce Bayou, the DE IS must address how recreation, like canoeing, kayaking, hiking, fishing, and other recreational pursuits will be affected by the proposal and what mitigation measures will be required and what their effectiveness is.	Brandt Mannchen, Sierra Club, June 8, 2011 letter	



## **Public Scoping Meeting**

July 21, 2011

## **Comments Received at Meeting**

Mr. Fred Majors, Property Owner

Mr. Richard Bumstead, Property Owner

Mr. Brandt Mannchen, Sierra Club

## Public Scoping Meeting - July 21, 2011

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9	PUBLIC SCOPING MEETING	
10	U.S. ARMY CORPS OF ENGINEERS	
11	GALVESTON DISTRICT	
12	PROPOSED LUCE BAYOU INTERBASIN TRANSFER PROJECT	
13	IN LIBERTY AND HARRIS COUNTIES, TEXAS	
14	JULY 21, 2011	
15	DAYTON COMMUNITY CENTER	
16	801 S. CLEVELAND STREET	
17	DAYTON, TEXAS	
18		
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1	ATTENDEES		
2	U.S. Army Corps of Engineers, Galveston District		
3	Commander Colonel Christopher W. Sallese		
4	Casey Cutler, Assistant Regulatory Branch Chief Mark Lumen, Attorney-Advisor, Office of Counsel		
5	Jayson M. Hudson, USACE-Regulatory Branch Pam Thibodeaux, Head Registrar		
6			
7			
8	AECOM		
9	Robert Esenwein, CEP Associate Vice President, Sr. Environmental Planner		
10			
11	Don Ripley, PE Project Applicant's Representative		
12			
13	Project Manager  Mary Ann Carroll		
14	Transfer Project Staff		
15			
16	Coastal Water Authority		
17	Gary Oradat, PE Executive Director		
18	Wayne Klotz, PE, D.WRE.  President		
19	Giti Zarinkelk, PE F.SAME  Board Member		
20	Alan D. Conner Second Vice President		
21	Tony Council, PE First Vice President		
22	ETIPC ATCE ETCRINGING		
23			
24			
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## 1 PUBLIC SIGN-IN SHEET 2 Manny De Pau 10777 Westheimer, Suite 400, Houston, Texas, 77042 281-558-8700 3 Charles Shumate 10777 Westheimer, Suite 400, Houston, Texas, 77042 281-558-8700 4 John Steven Bush P. O. Box 896 Hardin, Texas, 77561 936-334-2007 5 T. L. Cox P O. Box 1493 Cleveland, Texas, 77328 281-592-1003 6 Mike Bagstad 1004 Shepherd, Houston, Texas, 77056 281-224-3947 7 Augustor Campbell 900 Bagby, Houston, Texas, 77002 832-393-6486 8 Richard Cron 713-306-4905 Debra Dean 310 Stone, Dayton, Texas, 77535 9 936-346-5556 Larry Brannen 439 Hwy. 90, Liberty, Texas, 77575 10 713-705-1236 Hershel Brannen 313 Highway 90, Liberty, Texas, 77575 11 337-302-0388 Gary Oradat Coastal Water Authority 12 713-658-9020 ext. 26 Tony L. Council Coastal Water Authority 13 713-868-6900 Don Ripley AECOM 14 713-267-2853 Floyd Page 1233 CR 2327, Dayton, Texas, 77535 15 281-593-9039 Gail Page 1233 CR 2327, Dayton, Texas, 77535 16 281-593-9039 Giti Zarinkelk Coastal Water Authority 17 713-724-5489 Lisa Lattu 611 Walker, 18th Floor, Houston, 18 Texas, 77002 832-395-3075 19 Lisa Majors 10855 Highway 321 Dayton, Texas, 77535 20 281-659-3619 10855 Highway 321 Dayton, Fred Majors 21 Texas, 77535 281-659-3619 22 Leo Shipman 6425 FM 686, Dayton, Texas, 77535 936-391-5836 23 Wayne Klotz Coastal Water Authority Marcel Khouw Pate/CHCRWA 24 713-462-3178 Alan Conner 3010 FM 1409 Dayton, Texas, 77535 25 936-258-7235

1	PUBLIC SI	GN-IN SHEET (continued)
2	Jason Afinowicz	800 Wilcrest Houston, Texas, 77042 713-600-6841
3	Melecio Franco	Dayton News 832-877-8699
4	Richard Bumstead	2435 Wolf Road Huffman, Texas 713-838-5472
5		713-036-3472 8421 FM 1409 Dayton, Texas 936-258-3864
6		8421 FM 1409 Dayton, Texas 936-258-3864
7		Houston Wilderness 4916 Main Street, Houston, Texas
8		713-524-7330
9		2403 Cos St. Liberty, Texas, 77575 936-336-4558 ext. 221
10	Enell Cooper	PO Box 34, 27323 Huffman-Cleveland Huffman, Texas
11	Brandt Mannchen	281-883-6146 5431 Curew Houston, Texas, 77096
		713-664-5962
12	Showri Nandagiri, PE	North Harris County Regional Water Authority
13		3648 FM 1960 West Houston TX 77068
14	_	281-440-3924
15		PO Box 637 Dayton, Texas 77535 281-728-0780
ا ۽ ۽		103 Page Lane, Huffman, Texas 77336
16	R.N. & Sue Smart	516 CR 140, Liberty, Texas, 77575 936-336-3370
17	Robert Darden	14819 Hemlock Bridge Ct., Sugar Land, Texas, 77498
18		832-433-8052
19	Carol Skewes	Press 1939 Trinity, Liberty, Texas, 77575
20	Robert Scyandt	Press 1939 Trinity, Liberty, Texas, 77575
	Robert Hansen	TCEQ, Austin, Texas
21	Mike Morgan	512-239-4583 TPWD, Dickinson, Texas
22	Christopher Gareri	281-534-0146
23	Vice President,	5420 Dashwood Drive, Suite 206
24	General Counsel	Houston, Texas 77081
25		

COMMANDER SALLESE: Good evening, ladies and gentlemen. I'm Colonel Christopher Sallese. I'm the District Engineer for the U.S. Army Corps of Engineers, Galveston District, and I want to welcome you to tonight's public scoping meeting.

For the record, let me state that this scoping meeting is being conveyed at 18:30 on July the 21st, 2011, in Dayton Community Center, Dayton Texas.

Before I get started, I want to take this opportunity, first off, to thank you all for coming tonight. We're entering a process. We have an applicant who has filed a permit request with the U.S. Army Corps of Engineers, the Coastal Water Authority.

As we work through this process and as you walk around the room tonight, you'll see -- we've tried to outline through a flow chart how that process works.

And you know, there's some efforts that have gone into this before we got to this meeting tonight.

But I will tell you that this is where the heart of this application process really begins. We're looking at this Environmental Impact Statement. And it's a collaborative effort. When I say it's a collaborative effort, it's a collaborative effort between the Corps of Engineers, the Coastal Water Authority, multiple other federal agencies, the State of Texas, the public and,

you know, concerned citizens groups out there such as Sierra Club, Houston Wilderness and a couple others that we have -- couple others that we have here tonight. And of course, the City of Houston also is a -- is a key partner. This process is set up so that we examine the applicant's proposed project to see if there is a viable course of action for the applicant to execute.

This will eventually lead to a decision, a decision that will come to my desk on whether to issue a permit or not to issue a permit. And I will tell you this process, by the time it gets to that permit decision process, we're probably a good 24 to 36 months out on that process just because of the amount of time it takes to prepare this Environmental Impact Statement.

We'd like to do it faster, but we want to do it in a manner where we exercise our due diligence. And by "due diligence," as a representative of the federal government, I'm not an advocate for the project; I'm not an advocate against the project. I'm here to ensure that we follow all the laws that are outlined by the federal government and -- as we go through this permitting process.

Key to note, I think is that the -- we owe it to the applicant to ensure that if we reach a point where we do issue a permit, that we have done our due

diligence, and the applicant can stand strong on the results of that particular permit.

It's -- as I said before, it's a collaborative effort and I appreciate you all being here tonight so that we can begin this process that leads you to this collaboration.

The Coastal Water Authority is proposing to construct a pump station, sediment basin and a 26.5-mile canal to transfer drinking water from the Trinity River in Liberty County to Lake Houston. A Department of the Army permit for this work is being considered under Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act.

The Galveston District intends to prepare an Environmental Impact Statement, or EIS, on the proposed Luce Bayou Interbasin Transfer Project, which is the proposed transfer of water from the Trinity River in Liberty County to Lake Houston in Harris County, Texas.

The purpose of the scoping meeting is to gather information on the subjects to be studied in detail by the EIS.

Before I begin, I want to introduce some of our key people that we have -- or key groups that we have in the audience tonight. Tonight, we have with us representatives from the Texas Parks and Wildlife, the

Texas Commission on Environmental Quality, the City of Houston and, of course, the applicant, the Coastal Water Authority. We also have representatives from the Sierra Club and from the Houston Wilderness.

There are several people here tonight that I would like to introduce, and they are key members of my team. Seated at the table with me are Mr. Casey Cutler, he's the Assistant Regulatory Branch Chief; Mr. Mark Lumen, Attorney-Advisor in our Office of Counsel; Mr. Jayson Hudson, he's the Project Manager for this particular project, and he's the one who will be doing the lion's share of the hard legwork that will be done throughout this entire process.

I hope that all of you have had a chance to read the announcement of the scoping meeting. Copies of the announcement were distributed to the news media, individuals, agencies, and organizations believed to have an interest in these proceedings.

Additional copies are available at the entrance. The announcement mailing list and list of those present will be made a part of the record -- of the public record for this scoping meeting.

Has everyone completed an attendance card? If you haven't completed an attendance card, please see the ladies over by the door. I want to make sure that we

have everybody properly recorded. The attendance card is used to record the participants in the public hearing and to inform me of your desire to make an oral statement or to present written materials.

If you indicated on the attendance card that you want to make an oral statement, you will be given an opportunity to do so. The purpose of this hearing is next.

Let me clarify briefly the purpose. The purpose is to provide you with the opportunity to present your views, opinions and recommendations concerning the scope of the EIS. I would like to emphasize that the scoping meeting is not a voting contest and will simply determine the number of people for -- it is not a voting contest that will simply determine the number of people for or against the project.

The decision to issue or to deny a permit will be based on evaluation of probable impacts, including cumulative impacts of the proposed activity on the human environment. Consideration will be given to the protection as well as the utilization of important resources. The benefits which reasonably may be expected to accrue if the project is authorized will be balanced against the foreseeable detriments which may

result from the work.

All factors which may be relevant will be considered. These include the needs of the welfare of the people; Fish and Wildlife values, including introduction on non-native and invasive species; flood hazards; historic properties; economics and water supply and conservation.

The information and issues identified at this scoping meeting, along with information and issues provided in letters sent in response to the public notice and all other pertinent data will be considered in a determination of the scope of the EIS and in a subsequent evaluation of the permit application.

A public notice was published on April 19th, 2010, to solicit public comments for the proposed project. At that time, based on information provided by the applicant, a preliminary review indicated that an EIS was not required. However, based on a continuing permit assessment and information brought forth during initial coordination process, areas of potential significant impact on the human environment have been identified; therefore, the EIS process is being implemented so that the permit application can be fully evaluated and a permit decision can be mailed.

All comments received to date, including those

provided for review during the initial public notice process, will be considered by the Galveston District during EIS preparation.

The project is detailed in public notice SWG-2009-00188 dated April 19th, 2010. Copies of the notice are available at the entrance.

Let me discuss the briefing format for the scoping -- tonight's scoping meeting. Tonight's meeting will give all interested persons the opportunity to comment on the scope of the EIS for the proposed project.

Following this official statement, federal, state and local elected officials and agency representatives who wish to make a statement will be call on to do so. Then anyone who has indicated a desire to make a statement will be given an opportunity to do so. Please give all speakers the courtesy of not making any comments during their presentation. All individuals have an equal right to be heard tonight.

At this time, are there any representatives from federal agencies who wish to present a statement?

(None shown.)

COMMANDER SALLESE: Let the record show that I do not see anybody who wishes to make a statement on behalf of federal agencies.

I will now call on representatives of state agencies. If there's anybody from a state agency this evening who'd like to make a comment.

(None shown.)

COMMANDER SALLESE: Let the record show that there is not anybody from a state agency who would like to make a comment this evening.

I now call on the general public who wish to make a statement. Due to the number of individuals wishing to speak tonight, I ask that you limit your statements to 3 to 5 minutes. Statements longer than that should be summarized as quickly as possible within the time frame you're given and submitted -- or submit a full text to the exhibit tables for inclusion into the record.

To assist speakers in keeping track of time,

I've asked our timekeeper to indicate when one minute is

left for the speaker and to notify the speaker when the

allotted time has expired.

In order to be completely fair to everyone, I ask that you stop after your 3 to 5 minutes have elapsed.

When you are called, please come forward and speak into the microphone at the front of the stage.

When you come forward, please identify yourself by your

full name and address and state whether you represent an organization or agency or if you are here to speak for yourself.

If you possess some special interest or expertise that you believe should be considered in evaluation of your comments, please state so.

All subjects made -- all statements made and information provided must be relevant to the subject matter of this hearing. If you have any questions about your statement, I will ask for clarification as needed. While persons wishing to express their views on a project may be represented by counsel, cross-examination will not be allowed.

If you prefer to submit a written statement for inclusion into the record but do not want to make an oral statement, you may bring your written statement to the exhibit table at the front of the room.

With that, I have three people who have identified that they wish to make statements this evening. I ask that if your name is not called and you wish to make a statement, please see the ladies and get a card so that we can make sure that you're part of the record and make sure that it gets to Jayson.

We will open tonight with Mr. Fred Majors from Dayton, Texas. Mr. Majors?

MR. MAJORS: I'm Fred Majors. My address is 10855 Highway 321, Dayton, Texas. I'm 8 miles north of Highway 90.

The -- the proposed canal will run 1,000 foot on the south side of my property. There's a cell tower there -- existing cell tower there now that I understand will be moved and the canal will run beside my property.

Concerns that I have on my property: First of all, we do live on 321, and during our normal years of rain, the State ditches will fill up and sometimes flood my -- my front yard. So when the canal comes through -- if it comes through -- if and when it does on the proposed site, my first concern is, is drainage for the State; and then also, my property drains to the south, which will be the canal side, and I understand there will be a 6-foot-tall chain-link fence running on both sides, north and south, correct? On the corridor?

So my concerns are drainage, and then I also have concerns on wildlife and the buildup of mosquitoes along the canal and creating more problems for people that live up and down the canal.

Then I also have an issue. Years from now -- I grew up in Liberty, Texas and Dayton, but I've lived in Dayton since '88 and I grew up in Liberty. So I grew up on the Trinity River, and I know how the Trinity River

will rise, and also, there's times when it's not very --1 there's not much water in it, as a lot of you know. 2 So when the canal is built and water is being 3 pulled out of the Trinity, does the City of Houston have 4 the right to absolutely drain the Trinity River and I 5 could walk across the river with no water in it? 6 I'm not sure what it's going to do 25, 30 years 7 So that's just -- that's my concerns. from now. 8 I also have concerns on the depreciation of my 9 home, and the -- and what it does to my property value. 10 Liberty County Appraisal District just went up -- ooh, 11 12 from around \$4,500 an acre two years ago to 13 approximately \$9,700 an acre. So what's it going to do to my property? What's it going to do to my home? 14 15 Because I will live -- my home -- on the south side of my home will be 200 foot from the water. So what will 1.6 17 it do to the depreciation of my home? 18 That's all I have to say. Thanks. COMMANDER SALLESE: Thank you, sir. 19 Next, I have Richard Bumstead. 20 MR. BUMSTEAD: I'm Richard Bumstead. 21 live at 2435 Wolf Road in Huffman, Texas. 22 The proposed canal routing borders the east 23 24 side of my property for approximately 7,000 feet. proposed to take all my road frontage on the east side 25

of my properties, so I have no access. I've got a total of 1,484 acres in there, and I live on that site.

I also have some concern about the Homeland Security issue of putting a canal right parallel with the road where the public could have access to it, and what other issues could become involved.

That's my main concerns.

HEARING OFFICER: Understand, sir. Thank you.

Next, I have Brandt Mannchen -- Mannchen.

MR. MANNCHEN: Hi, Casey, how are you?

MR. CUTLER: I'm fine, Brandt.

MR. MANNCHEN: Haven't seen him in a long time.

My name is Brandt Mannchen. I'm here representing the Houston Sierra Club. We've already submitted some comments in 2010, and then recently, but we're going to submit some additional comments, and these are just a summary of those.

Some of the concerns that we would like the Draft Environmental Impact Statement to address include: There's going to be a change in the location of most of the water that comes into Galveston Bay with the completion of this project. Most of the water now comes down the Trinity River versus the San Jacinto River.

Well, we're going to take a good portion of the Trinity River water and route it down the San Jacinto River. So questions are: What is this going to do to the bottomland hardwoods in the Trinity River as far as seasonal drying and wetting? What is this going to do to the Trinity River delta, including the -- some of the aquatic plants that they've talked about using as indicator species for fresh-water inflows. And what's going to happen from a reduction of sediments, organic matter and nutrients for oysters and other things that live in Trinity Bay versus coming in on the San Jacinto River.

So we think those are really important questions, because they could affect how productive Galveston Bay is. And we think they need to be addressed in this project because the Region H water planning process, which I interact with, they always say, "Well, those kinds of questions will be answered in the site-specific projects." And so we're at that particular point now.

We're also concerned about how salinity will change due to that reduction in flows down the Trinity River. What does that mean? Is it going to make it more salty, and therefore, the oyster drills get in and do more damage to the oysters? So we think that's

really important.

Also, we're interested in what happens depending on where it hits Luce Bayou as far as those two alternatives that hit Luce Bayou. And in those existing ecosystems, how it's going to change that from a rising-and-falling system to a constant-water-level kind of system.

So that's real important. Also, the erosion, you know, how that bigger flow is going to affect both Luce Bayou as well as the opening of Luce Bayou to the shoreline of Lake Houston. And what kind of mitigation could be done for -- for any sort of those impacts.

Also, we're interested in what this may or may not do to the fisheries of Lake Houston, as well as the fisheries in Luce Bayou. In particular, we're interested in exotic plant and animal species that could be introduced between the two water systems, the two watersheds.

And also, the two watersheds are not identical as far as their aquatic fauna and flora.

Is that three minutes or --

MR. LUMEN: Yes.

MR. MANNCHEN: Thank you.

And so what's going to happen, are we going to get transfer of disease vectors, parasites,

phytoplankton, zooplankton, invertebrates, fish, terrestrial, aquatic plants. There's a lot of things that could happen. So we need to look at that carefully and say -- You know, if these are potential things, we need to analyze that and then say how could we mitigate that.

Leakage and evaporation from the canal: We'd like that to be a subject to look at because, you know, water's very precious, so we don't want to waste any of it. And we should look at why we shouldn't maybe have a covered canal or a pipeline system total, instead of just an open canal for most of the way.

Shifts in benthic invertebrate communities, changes in conductivity, turbidity, salinity, alkalinity. It's real important that we do monitoring to see what happens even if this gets approved. We should do some pre-year monitoring and then we do some post-operational monitoring, and that's real crucial.

I'm going to submit an article with these comments which suggest maybe three years pre, one-year during when this operation begins, and then three years after as one way of looking at what the impacts might be.

Entrainment is a real important problem as far as aquatic species being entrained on those big screens

or into the pipeline systems.

Sedimentation and erosion, how that's going to be affected. And finally, fish-habitat relationships, are they going to be affected by transferring the water between the two watersheds?

And last thing I want to say is, cumulative impacts, there's two large projects: One is in the DEIS Phase right now, which is the Proposed Grand Parkway H and I 1. You should look at that project and cumulative impacts from that, plus this project.

There's also a project I just became aware of called the Bayport-Cleveland Corridor, and so you may also want to look at that as far as future foreseeable as whether that might have some environmental impact.

Thank you.

COMMANDER SALLESE: That's all the cards I have. Is there anybody else who wishes to speak?

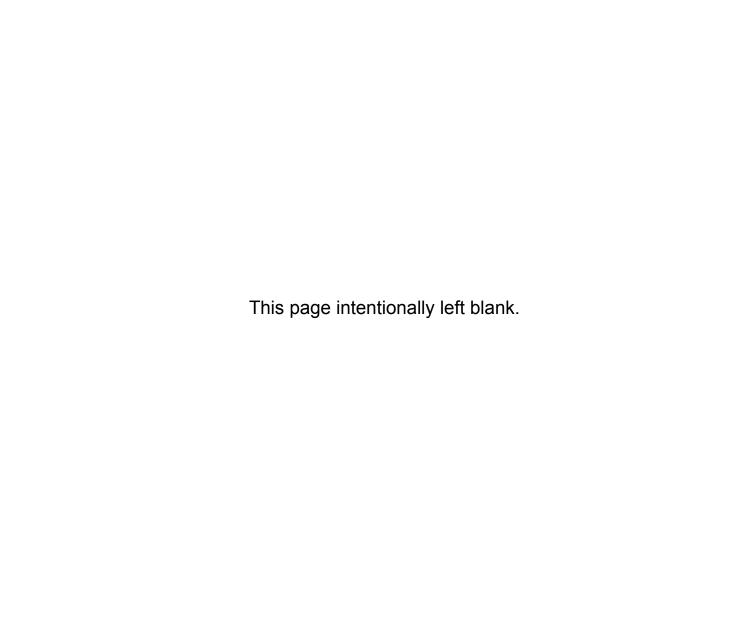
(None shown.)

COMMANDER SALLESE: Last chance? Okay.

In conclusion, the official record will be open for eight days, eight calendar days. Written statements received on or before July 29, 2011, will be included in the hearing record. All statements placed in the record will be given consideration.

I thank you for your attendance and interest

STATE OF TEXAS 1 2 COUNTY OF HARRIS 3 I, Susan T. Baker, a Certified Shorthand Reporter 4 and Notary Public in and for the State of Texas, hereby 5 certify that the above and foregoing contains a true and 6 7 correct transcription of the above-referenced public meeting, including all public comments, reported by me. 8 Given under my hand and seal of office on this, the 9. 26th day of July, 2011. 10 11 12 13 Susan T. Baker, RDR, Texas CSR #1561 Expiration: 12/31/1114 Notary Public, State of Texas Commission Expires: 1/7/14 15 16 17 18 Allied Advanced Reporting, Inc. Texas CRCB Firm Registration No. 252 19 1647 Colquitt Houston, Texas 77006 713.524.6777 20 1.800.223.9409 21 AlliedAdvancedReporting.com 22 2.3 24 25



Comments - 24

## **Public Notice Comments**

# Comments Received Following April 19, 2010 Publication of Public Notice

Brandt Mannchen, Sierra Club, April 30, 2010

Sharon Parrish, US Environmental Protection Agency, May 17, 2010

Richard Bumstead, Property Owner, May 17, 2010

Charles Maguire, Texas Commission on Environmental Quality, May 18, 2010

Scott Jones, The Galveston Bay Foundation, May 18, 2010

Stephen Parris, US Fish and Wildlife Service, May 19, 2010

Bruce Bodson, Individual, May 19, 2010

Heather Young, National Marine Fisheries Service, May 24, 2010

Rebecca Hensley, Texas Parks & Wildlife Department, May 26, 2010



Houston Regional Group P. O. Box 3021 Houston, Texas 77253-3021 713-895-9309 http://texas.sierraclub.org/houston/

Mr. Jayson M. Judson Regulatory Branch, CESWG-PE-RB Galveston District U.S. Army Corps of Engineers P.O. Box 1229 Galveston, Texas 77553-1229

Texas Commission on Environmental Quality (TCEQ) 401 Coordinator MSC-150 P.O. Box 13087 Austin, Texas 78711-3087

Dear Mr. Hudson and TCEQ,

Enclosed are the comments of the Houston Regional Group of the Sierra Club (Sierra Club) regarding the U.S. Army Corps of Engineers (Corps), Galveston District, Section 10/404 Permit Application No. SWG-2009-00188, published on April 19, 2010, for the proposed construction by the Coastal Water Authority (CWA) of a 26.5 mile water conveyance structure.

The proposal will start at the Trinity River about six miles east of the intersection of FM 1008 and County Road 2317 in eastern Liberty County, ultimately going in a southwest direction to discharge near the confluence of Luce Bayou and Lake Houston, about one mile south of the FM 2100 bridge crossing and Luce Bayou in Harris County.

# The proposal will:

- 1. Include 3 miles of 108 inch diameter pipeline and 23.5 miles of clay-lined earthen canal with berms, revetments, armour stones, rip rap, water control gates, culverts, access roads, outfalls, swales, grates, mowed grass right-of-ways, drainage ditches, perimeter fences, sedimentation basin, and 20 acre sediment storage. Clearing an approximately 300 foot right-of-way (ROW) is required.
- 2. There will be bawl-ground siphons and box culverts where the canal crosses existing roads, easements or utilities, and areas that would require maintenance of existing hydrology.
- 3. About 203.10 acres of jurisdictional aquatic resources will be affected.

- 4. About 200.95 acres of wetlands and 2.15 acres of waters of the United States will be affected.
- 5. About 118.93 acres of the 200.95 acres of wetlands are forested wetlands, 25.55 acres are scrub/shrub wetlands, 45.26 acres are emergent wetlands, and 11.21 acres are open water associated with wetlands.
- 6. Of the waters of the United States 0.18 acres are unnamed tributaries, 1.67 acres are the Trinity River, and 0.30 acres are Lake Houston/Luce Bayou confluence.
- 7. About 2,953 acres within the Lower Trinity River Floodplain Habitat Stewardship Program acquisition boundary for the Trinity River National Wildlife Refuge (TRNWR) will be acquired for mitigation. Of the 2,953 acres, 964 acres are forested wetlands, 6 acres are emergent wetlands, 25 acres are scrub/shrub wetlands, and 213 acres are mixed forested/emergent/scrub/shrub wetlands.
- 1) The Sierra Club is concerned about this permit proposal due to its cumulative and non-water dependent environmental impacts and requests that the Corps prepare, at a minimum, an environmental assessment (EA) or more appropriately an environmental impact statement (EIS). There should be a public comment period so the public can review, comment on, and understand the full environmental impacts of this water conveyance structure, associated developments, and any secondary development that this proposal will promote by providing water to the Houston area.

The Sierra Club believes this is a "major federal action significantly affecting the quality of the human environment" as documented in these comments. If the Corps has the applicant prepare the EIS then the Corps must ensure it makes the EIS its own, as required by law, and not just accept the EIS and place the Corps name on the cover of the document, and release the EIS to the public.

- 2) The Corps should require the CWA to prepare an analysis about how this proposal will be affected by climate change or affect ecosystems' ability to adapt to climate change and a plan to deal with these effects. Climate change will alter existing ecosystems and make it more difficult for plants and animals to adapt successfully to these changed ecosystems. The analysis and plan should address questions like:
- 1. How will this proposal be affected by or exacerbate climate change?
- 2. What can be done to create more resilient and resistant habitats and ecosystems?

- 3. What can this proposal do to reduce CO2 or other greenhouse gas emissions within the area where this proposal has environmental effects?
- 4. What can be done to assist plants and animals so they can adapt to climate change?

The Corps should require the preparation and include in this permit proposal a climate change ecological resilience and resistance plan as part of mitigation required for environmental impacts. This plan would assess the biological and ecological elements in the area where this proposal has environmental effects and the effects that climate change has had and will have on these biological and ecological elements. The plan would also assist plants, animals, and ecosystems in adapting to climate change and would require monitoring of changes and mitigation measure effectiveness. The plan would be based on:

- 1. Protecting existing functioning ecosystems in the area where this proposal has environmental effects.
- 2. Reducing stressors on the ecosystems in the area where this proposal has environmental effects.
- 3. Restoring natural functioning ecological processes in the area where this proposal has environmental effects.
- 4. Using natural recovery in the area where this proposal has environmental effects, in most instances.
- 5. Acquiring buffers and corridors to expand and ensure connectivity of ecosystems in the area where this proposal has environmental effects.
- 6. Intervening to manipulate (manage) ecosystems in the area where this proposal has environmental effects only as a last resort.
- 3) The proposal does not document how many total acres will be needed for the 26.5 mile ROW. Much of the ROW is 300 feet wide but the additional ROW (acreage) needed for the pumping station or other ancillary uses are not provided. Just the 300 foot wide ROW encompasses over 964 acres (300 feet x 5,283 feet x 26.5 miles divided by 43,560 square feet).

The proposal also does not state how many individual wetlands will be destroyed. By counting the number of wetlands on the 44 sheets of plans included with the public notice the Sierra Club found that 270 individual wetlands, 8 individual drainages, and 3 other water units (Lake Houston, Trinity River, and Open Water) would be destroyed or degraded by this proposal. This information is needed by the public and decision-makers, via a public review and comment

process, so that they can review, comment on, and understand the proposal and its full environmental impacts.

4) The proposal does not provide information about the length of Luce Bayou that will be used as a part of this water conveyance system. What length, in miles, of Luce Bayou will be used to convey water? The public notice does not state what ecosystems are found within this length of Luce Bayou, what their present condition is, what their condition will be after the proposal is built, and what the environmental impacts are of putting huge quantities of water into an existing natural stream.

Some impacts could include scouring of banks, soil erosion, sedimentation of aquatic habitats, submergence of habitats, artificially keeping water levels high in Luce Bayou and therefore altering the hydrology, hydro-period or seasonality, and frequency of inundation, etc. All of this needs to be detailed but there is nothing in this public notice that acknowledges and addresses this issue via mitigation and the opportunity for public comment. This information is needed by the public and decision-makers, via a public review and comment process, so that they can review, comment on, and understand the proposal and its full environmental impacts.

5) It is obvious that this water conveyance structure, associated developments, and any secondary development that this proposal will promote by providing water to the Houston area (like northern Harris County, southern Montgomery County, and other counties farther west) will alter overland flows, drainages, and flatwoods. How much alteration occurs, how much area is affected, how it will be affected, and how wetlands outside the ROW (north, south, east, and west) and their hydrology and drainage will be affected is not stated.

It appears that some of the streams that may be affected by alterations in hydrology, drainage, and wetlands functions include Luce Bayou, Cedar Bayou, Long John Creek Gillen Bayou, East Fork of Cedar Bayou, Tanner Bayou, Davis Bayou in addition to adjacent and nearby flatwoods. As required by the Compensatory Mitigation for Losses of Aquatic Resources, 33 CFR Part 332, rules, stream restoration via rehabilitation of ecological function is needed as mitigation for this proposal. This information is needed by the public and decision-makers, via a public review and comment process, so that they can review, comment on, and understand the proposal and its full environmental impacts.

6) The Corps should require that the applicant conduct a cumulative environmental analysis, assessment, and evaluation for this water conveyance structure, associated developments, and any secondary development that this proposal will promote in the Houston area. By providing the water it is obvious that via induced development that the entire Houston area will be potentially opened up for commercial, industrial, and residential development as well as

water quality (stormwater run-off and sewage treatment plants) and drainage impacts (ditching and channelization of streams). This information is needed by the public and decision-makers, via a public review and comment process, so that they can review, comment on, and understand the proposal.

7) If the Clean Water Act means anything then non-water dependent actions that destroy natural ecosystems and their birth places, wetlands, should not be approved for destruction and degradation via Section 10/404 permits. What is sacred and how can the natural water cleansing ability of streams be protected if the wetlands along the stream are destroyed or degraded?

This proposal does not comport with Section 404(b)(1) guidelines, which are mandatory for the Corps to follow as part of the implementation strategy that the Clean Water Act requires. Section 404(b)(1) guidelines require that non-water dependent actions must not be permitted to destroy wetlands which are "special aquatic sites".

Practicable alternatives do exist as shown on **sheet 2 of 44**. However these alternatives are not explained, their environmental impacts are not stated, there is no comparison of environmental impacts between these alternatives and the proposed action, and no mitigation requirements are presented for these alternatives. The alternative shown on **sheet 2 of 44**, which begins at the existing Trinity River Pump Station and appears to cover a shorter distance than the proposed alternative but the public cannot determine the comparative advantages or disadvantages because these are not explained in the public notice. This information is needed by the public and decision-makers, via a public review and comment process, so that they can review, comment on, and understand the proposal and its full environmental impacts.

This practicable alternative is "available and capable of being done after taking into consideration cost, existing technology and logistics in light of overall project purposes." In addition, as required by the Section 404(b)(1) guidelines, "If it is otherwise a practicable alternative an area not presently owned by the applicant which could reasonably be obtained, utilized, expanded or managed in order to fulfill the basic purpose of the proposed activity may be considered".

There is no convincing documentation in the permit application public notice that shows that the applicant cannot construct this water conveyance structure, associated developments, and any secondary development that this proposal will promote in the Houston area without destroying or degrading nearby wetlands. This type of analysis has not been included in the public notice.

As the Corps knows the presumption is that practicable alternative sites exist in the Section 404(b)(1) guidelines "unless clearly demonstrated otherwise". No such "clearly demonstrated" analysis is provided in the public notice. There is no alternatives analysis provided. This information is needed by the public and

decision-makers, via a public review and comment process, so that they can review, comment on, and understand the proposal and its full environmental impacts.

8) The permit notice is inadequate as a basis for determining the full environmental impacts of this proposal and the effect that this proposal will have on the public interest review factors in **33 CFR 320-332**, regulatory programs of the Corps, and other pertinent laws, regulations, and executive orders.

The Corps should require that an EA/EIS be produced which accurately assesses, analyzes, and evaluates all the environmental impacts on the "human environment." The Corps must take a "hard" look and make the EIS its own and not simply agree with the FEIS because another federal agency prepared it but must make the FEIS its own before endorsing and tiering to the FEIS. The loss of wetlands, increased water quality effects, alteration of floodplain values and functions, and other environmental impacts trigger the "major federal action significantly affecting the quality of the human environment" requirement of the NEPA and the need for an EIS. The Corps should understand that this proposal is potentially a 26.5 mile hard structure that could alter regionally hydrology over a large area.

Some of the public interest review factors that must be considered and are relevant include conservation, economics, aesthetics, air quality, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, and the needs and general welfare of the people.

The public interest factors analysis is very important and is separate and larger than simply reviewing the proposed dredge/fill impacts and proposed mitigation. The Corps should prepare its analysis of public interest factors carefully when reviewing this proposal.

9) The Corps of Engineers Compensatory Mitigation for Losses of Aquatic Resources regulations states "332.1(d) Public interest. Compensatory mitigation may also be required to ensure that an activity requiring authorization under section 404 of the Clean Water Act and/or sections 9 or 10 of the Rivers and Harbors Act of 1899 is not contrary to the public interest."

The mitigation of wetlands lost due to this proposal and this water conveyance structure, associated developments, and any secondary development that this proposal will promote in the Houston area may be in the public interest if the applicant buys mitigation lands are provides them to the U.S. Fish and Wildlife Service (FWS) and the TRNWR and other appropriate mitigation is required. This cannot be done however there is no analysis provided to the public and decision-makers which shows how compensation and mitigation ratios were

determined and whether this is adequate for the purposes of Section 404 and the mitigation rules that the Corps must use. It is not clear whether the at least 964 acres that will be part of the 300 foot ROW has been mitigated for appropriately in addition to the restoration of watershed, drainage, and hydrological features for streams, flatwoods, swales, sloughs, and other water features that may be affected by this proposal either directly or indirectly.

It is in the public interest to support the existence and continued flourishing of bottomland hardwood forested and riparian wetlands due to their high woody plant and animal bio-diversity. In Texas, calculations in the early 1990's stated that only 60% of such habitats remained from pre-settlement days.

Using bottomland hardwood forested wetlands in the Trinity River Floodplain as mitigation is good and we support the acquisition of the almost 3,000 acres of Trinity River Floodplain that will be given to the FWS for management as part of the TRNWR. But to ensure that out-of-ecosystem location and out-of-watershed mitigation is fully provided for additional mitigation should be required within the San Jacinto River Watershed in addition to that proposed for the Trinity River Watershed. Such an action ensures that protection of a sustainable portion of the San Jacinto River Bottomland Ecosystem is assured. After all, under 332.1(a), Purpose and General Considerations, it states that the rules must "provide for regional variations in wetland conditions, functions, and values" and this is done when mitigation is conducted in the Trinity River and San Jacinto River Watersheds.

The Sierra Club recommends that the same 10:1 wetlands mitigation ratio be used (which we support) for direct and indirect environmental impacts for mitigation in the San Jacinto River Watershed as was used for the Trinity River Watershed. This is predicated on the increasing rarity of bottomland hardwood forested and riparian wetlands due to their significant losses since pre-settlement times. An increasing portion of the bottomland hardwood forested and riparian wetland ecosystems are being fragmented and developed into commercial, residential, and industrial establishments. The time is now to save a sustainable portion of the San Jacinto River Watershed and Trinity River Watershed.

Under 332.3 General compensatory mitigation requirements, (a) General considerations, (1), the rules state "When evaluating compensatory mitigation options, the district engineer will consider what would be environmentally preferable. In making this determination, the district engineer must assess the likelihood for ecological success and sustainability, the location of the compensation site relative to the impact site and their significance within the watershed, and the costs of the compensatory mitigation project." This type of evaluation suits protection of wetlands in the Trinity River Watershed via the TRNWR and the San Jacinto River Watershed via the Legacy Land Trust's efforts to protect bottomland hardwood forested wetlands.

The mitigation rules in 332.3(b)(1), go on to state that "In general, the required compensatory mitigation should be located within the same watershed as the impact site, and should be located where it is most likely to successfully replace lost functions and services, taking into account such watershed scale features as aquatic habitat diversity, habitat connectivity, relationships to hydrologic sources (including the availability of water rights), trends in land use, ecological benefits, and compatibility with adjacent land uses."

This echoes and supports why the San Jacinto River Watershed should be the location for compensatory mitigation along with the Trinity River Watershed. 332.3(b)(1) does not require the District Engineer to prefer the use of mitigation banks but says "shall consider the type and location options in the order presented in paragraphs (b)(2) through (b)(6)." In other words there is no requirement that mitigation banks be used.

The mitigation rules in 332.3 go on to state in (c) Watershed approach to compensatory mitigation, (1), "The district engineer must use a watershed approach to establish compensatory mitigation requirements in DA permits to the extent appropriate and practicable. Where a watershed plan is available, the district engineer will determine whether the plan is appropriate for use in the watershed approach for compensatory mitigation. In cases where the district engineer determines that an appropriate watershed plan is available, the watershed approach should be based on that plan. Where no such plan is available, the watershed approach should be based on information provided by the project sponsor or available from other sources. The ultimate goal of a watershed approach is to maintain and improve the quality and quantity of aquatic resources within watersheds through strategic selection of compensatory mitigation sites.

# (2) Considerations.

(i) A watershed approach to compensatory mitigation considers the importance of landscape position and resource type of compensatory mitigation projects for the sustainability of aquatic resource functions within the watershed. Such an approach considers how the types and locations of compensatory mitigation projects will provide the desired aquatic resource functions, and will continue to function over time in a changing landscape. It also considers the habitat requirements of important species, habitat loss or conversion trends, sources of watershed impairment, and current development trends, as well as the requirements of other regulatory and non-regulatory programs that affect the watershed, such as storm water management or habitat conservation programs. It includes the protection and maintenance of terrestrial resources, such as non-wetland riparian areas and uplands, when those resources contribute to or improve the overall ecological functioning of aquatic resources in the watershed. Compensatory mitigation requirements determined through the watershed approach should not focus

exclusively on specific functions (e.g., water quality or habitat for certain species), but should provide, where practicable, the suite of functions typically provided by the affected aquatic resource.

- (ii) Locational factors (e.g., hydrology, surrounding land use) are important to the success of compensatory mitigation for impacted habitat functions and may lead to siting of such mitigation away from the project area. However, consideration should also be given to functions and services (e.g., water quality, flood control, shoreline protection) that will likely need to be addressed at or near the areas impacted by the permitted impacts.
- (iii) A watershed approach may include on-site compensatory mitigation, off-site compensatory mitigation (including mitigation banks or in-lieu fee programs), or a combination of on-site and off-site compensatory mitigation.
- (iv) A watershed approach to compensatory mitigation should include, to the extent practicable, inventories of historic and existing aquatic resources, including identification of degraded aquatic resources, and identification of immediate and long-term aquatic resource needs within watersheds that can be met through permittee-responsible mitigation projects, mitigation banks, or in-lieu fee programs. Planning efforts should identify and prioritize aquatic resource restoration, establishment, and enhancement activities, and preservation of existing aquatic resources that are important for maintaining or improving ecological functions of the watershed. The identification and prioritization of resource needs should be as specific as possible, to enhance the usefulness of the approach in determining compensatory mitigation requirements.
- (v) A watershed approach is not appropriate in areas where watershed boundaries do not exist, such as marine areas. In such cases, an appropriate spatial scale should be used to replace lost functions and services within the same ecological system (e.g., reef complex, littoral drift cell)."

Because of the importance of the San Jacinto River Watershed to the City of Houston and surrounding communities with regard to water quality and flooding the mitigation by acquisition of bottomland hardwood forested or riparian wetlands along the San Jacinto River and its tributaries should be accomplished as part of this proposal.

- 10) Financial assurances have been poorly addressed in the proposal. Under Subpart J Compensatory Mitigation for Losses of Aquatic Resources, 230.91, Purpose, adequate wetland mitigation requires sufficient financial assurances. Such financial assurances have not been addressed in the public notice for this proposal and must be. The public needs this information so it can review, comment on, and understand the full environmental impacts of this proposal.
- 11) Buffers have not been addressed in the proposal. Under 33 CFR part 332, buffers, which include upland, wetland, and or riparian areas that protect and or enhance aquatic resource functions associated with wetlands, rivers,

streams, etc., must be provided for as well as functional capacity (the degrees an area of aquatic resource performs a specific function). Although uplands are provided at the mitigation site at the Trinity River nowhere else are they mentioned or mitigation provided in the public notice and none have been provided for in the San Jacinto River Watershed.

How to address drainages, overland flow through flatwoods, and other poorly drained areas due to this proposal and its cumulative impacts as well as protecting the ecological and hydrological connections and benefits they have needs to be addressed for both the San Jacinto River Watershed and the Trinity River Watershed. The public needs this information so it can review, comment on, and understand the full environmental impacts of this proposal.

12) The quantification of water pollution from this water conveyance structure, associated structures, and any secondary development that this proposal will promote by providing water in the Houston area is not found in the public notice. The applicant ignores and does not quantify the amount and type of water pollutants that will be generated by the proposal and any secondary development that occurs due to making water available.

According to "Road Ecology, Science and Solution," by Forman, et. al., Island Press, 2003, pages 201-223, "Major sources of roadside pollutants are vehicles, roads and bridges, and dry and wet (dust and rain) atmospheric Localized, less-frequent sources include spills of oil, gasoline deposition. (petrol), industrial chemicals, and other substances, and losses of materials in accidents involving vehicles and roadside structures. In addition, objects discarded from vehicles accumulate along many roads. Roadway maintenance practices, such as sanding and de-icing road surfaces and applying herbicides to roadsides, usually add pollutants. Also, both the road surface and the tires rolling on it gradually degrade ... One assessment of chemicals found along roads indicates that 19 of the 23 important pollutants (83%) come from vehicles ... Thus one-third (35%) of the types of roadside pollutants come from oil. grease, and hydraulic fluids, Engine and parts wear produces 30% of the pollutant types; metal plating and rust, 22%; tire wear, 22%; fuel and exhaust, 22%; and brake lining wear, 17%. Sanding and de-icing agents produced onefifth (22%) of the pollutant types; roadbed and road surface wear, 17%; and herbicide and pesticide use, 13%. These figures do not include heavy metals and other chemicals that leach from bridges into streams and other water bodies. In short, chemical pollutants along roads originate from diverse sources, and even significantly reducing a single pollutant would normally require control of a number of the sources."

The public notice provides no quantification of water pollutants from the proposal, associated structures, and induced development due to the provision of water in the Houston area. Since the water provided by this proposal will allow development and growth in many parts of the Houston area it is only fair that the

impacts on undeveloped lands that this proposal could have via secondary development be analyzed. The water quality impacts of the proposal and the secondary development that may result from the proposal should be analyzed and provided in the public notice. The public needs this information so it can review, comment on, and understand the full environmental impacts of this proposal.

- 13) There is nothing in the public notice which talks about the impacts that this water conveyance structure, associated structures, and any secondary development that this proposal will promote by providing water in the Houston area will have on wildlife. The Sierra Club is concerned about fragmentation of habitat and increased roadkill of wildlife due to the construction of this water conveyance structure, associated structures, and any secondary development that this proposal will promote by providing water (with additional roads and possible roadkill) in the Houston area. The public needs this information so it can review, comment on, and understand the full environmental impacts of this proposal.
- 14) The Corps must acknowledge and analyze the economic impacts that this water conveyance structure, associated structures, and any secondary development that this proposal will promote by providing water in the Houston area has in relation to environmental impacts. This includes the qualitative and quantitative impacts on flooding and water quality in the area including long-term environmental impacts that this proposal will have. The NEPA requires such analysis as follows:
- 1. Section 101(a) of the NEPA states, "The Congress, recognizing the profound impact of man's activity on the interrelations of all components of the natural environment, particularly the profound influences of population growth, high-density urbanization, industrial expansion, resource exploitation, and new and expanding technological advances ... to use all practicable means and measures, including financial and technical assistance, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans."
- 2. **Section 101(b)(5)** of the NEPA states, "achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities".
- 3. **Section 102(1)(B)** of the NEPA states, "... which will insure that presently unquantified environmental amenities and values may be given appropriate consideration in decision-making along with economic and technical considerations".

- 4. Section 102(1)(C) of the NEPA states, "... major Federal actions significantly affecting the quality of the human environment". (what is economics but a part of the human environment)
- 5. **Section 201(2)** of the NEPA states, "current and foreseeable trends in the quality, management and utilization of such environments and the effects of those trends on the social, economic, and other requirements of the Nation".
- 6. **Section 201(3)** of the NEPA states, "the adequacy of available natural resources for fulfilling human and economic requirements of the National in the light of expected population pressures".
- 7. Section 202 of the NEPA states, "to be conscious of and responsive to the scientific, economic, social, esthetic, and cultural needs and interests of the Nation".
- 8. **Section 204(4)** of the NEPA states, "to develop and recommend to the president national policies to foster and promote the improvement of environmental quality to meet the conservation, social, economic, health, and other requirements and goals of the Nation".
- 9. **Section 1501.2(b)** of CEQ NEPA regulations states, "Identify environmental effects and values in adequate detail so they can be compared to economic and technical analyses."
- 10. Section 1508.8(b) of CEQ NEPA regulations states, "... Effects includes ecological ... aesthetic, historic, cultural, economic, social or health, whether direct, indirect, or cumulative".
- 11. **Section 1508.14** of CEQ NEPA regulations states, "... This means that economic or social effects are not intended by themselves to require preparation of an environmental impact statement. When an environmental impact statement is prepared and economic or social and natural or physical environmental effects are interrelated, then the environmental impact statement will discuss all of these effects on the human environment".

Without a full accounting of the economic and environmental costs the Corps will not be integrating all the costs of the water conveyance structure, associated structures, and any secondary development that this proposal will promote by providing water in the Houston area and providing that information to the public for its review and comment about all costs and benefits of the proposal.

15) The Sierra Club requests that the Corps fully examine all cumulative impacts due to this water conveyance structure, associated structures, and any secondary development that this proposal will promote by providing water in the Houston area in the EIS. The cumulative impacts of all past, present, and future

foreseeable actions must be identified and their impacts must be assessed, analyzed, and evaluated. The cumulative impacts analysis in the EIS must comply with the Council on Environmental Quality (CEQ) NEPA implementing regulations, 40 CFR 1502.16, 1508.7, 1508.8, 1508.25, and 1508.27.

In addition, the Corps must consider cumulative impacts when looking at public interest review factors in 33 CFR 320-332, like conservation, air quality, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs safety, food and fiber production, mineral needs and , in general, the needs and welfare of the people.

The CEQ has extensively described the minimum requirements for analysis and mitigation of cumulative impacts on environmental quality. At minimum, an adequate cumulative effects analysis must:

- 1. Identify the past, present, and reasonably foreseeable actions of the Corps and other parties affecting each particular aspect of the affected environment
- 2. Must provide quantitative information regarding past changes in habitat quality and quantity, water quality, resource values, and other aspects of the affected environment that are likely to be altered by Corps actions
- 3. Must estimate incremental changes in these conditions that will result from Corps actions in combination with actions of other parties, including synergistic effects
- 4. Must identify any critical thresholds of environmental concern that may be exceeded by Corps actions in combination with actions of other parties
- 5. Must identify specific mitigation measures that will be implemented to reduce or eliminate such effects

The Corps must use the CEQ's January 1997 document, "Considering Cumulative Effects Under the National Environmental Policy Act" for determining cumulative impacts and carrying out its analysis, assessment, and evaluation. It is clear that the Corps has an affirmative duty, a statutory duty, and a regulatory duty to carry out cumulative impacts assessment.

# Some of the especially important quotes from the CEQ document include:

a. On page v, "Only by reevaluating and modifying alternatives in light of the projected cumulative effects can adverse consequences be effectively avoided or minimized. Considering cumulative effects in also essential to developing appropriate mitigation and monitoring its effectiveness."

- b. On page v, "By evaluating resource impact zones and the life cycle of effects rather than projects, the analyst can properly bound the cumulative effects analysis. Scoping can also facilitate the interagency cooperation needed to identify agency plans and other actions whose effects might overlap those of the proposed action."
- c. On page vi, "When the analyst describes the affected environment, he or she is setting the environmental baseline and thresholds of environmental change that are important for analyzing cumulative effects. Recently developed indicators of ecological integrity (e.g., index of biotic integrity for fish) and landscape conditions (e.g., fragmentation of habitat patches) can be used as benchmarks of accumulated change over time ... GIS technologies provide improved means to analyze historical change in indicators of the condition of resources, ecosystems, and human communities, as well as the relevant stress factors.
- d. On page vi, "Most often, the historical context surrounding the resource is critical to developing these baselines and thresholds and to supporting both imminent and future decision-making."
- e. On page ... the consequences of human activities will vary from those that were predicted and mitigated ... therefore, monitoring the accuracy of predictions and the success of mitigation measures is critical.
- f. On page vi, "Special methods are also available to address the unique aspects of cumulative effects, including carrying capacity analysis, ecosystem analysis, economic impacts analysis, and social impact analysis.
- g. On page vii, Table E-1, "CEA Principles ... Cumulative effects analysis ... Address additive, countervailing, and synergistic effects ... Look beyond the life of the action.
- h. On page 1, "The range of actions that must be considered includes not only the projects proposal but all connected and similar actions that could contribute to cumulative effects.
- i. On page 3, "The purpose of cumulative effects analysis, therefore is to ensure that federal decisions consider the full range of consequences of actions ... If cumulative effects become apparent as agency programs are being planned or as larger strategies and policies are developed then potential cumulative effects should be analyzed at that times.
- j. On page 3, Cumulative effects analysis necessarily involves assumptions and uncertainties, but useful information can be put on the decision-making table now ... Important research and monitoring programs can be identified that will

improve analyses in the future, but their absence should not be used as a reason for not analyzing cumulative effects to the extent possible now ... adaptive management provisions for flexible project implementation can be incorporated into the selected alternative."

- k. On page 4, "The Federal Highway Administration and state transportation agencies frequently make decisions on highway projects that may not have significant direct environmental effects, but that may induce indirect and cumulative effects by permitting other development activities that have significant effects on air and water resources at a regional or national scale, The highway and other development activities can reasonably be foreseen as "connected actions."
- I. On page 7, "Increasingly, decision makers are recognizing the importance of looking at their projects in the context of other development in the community or region (i.e., of analyzing the cumulative effects) ... Without a definitive threshold, the NEPA practitioner should compare the cumulative effects of multiple actions with appropriate national, regional, state, or community goals to determine whether the total effect is significant ... Cumulative effects results from spatial (geographic) and temporal (time) crowding of environmental perturbations. The effects of human activities will accumulate when a second perturbation occurs at a site before the ecosystem can fully rebound from the effect of the first perturbation."
- m. On page 8, Table 1-2, lists 8 principles of cumulative effects analysis. See copy enclosed.
- n. On page 19, "The first step in identifying future actions is to investigate the plans of the proponent agency and other agencies in the area. Commonly, analysts only include those plans for actions which are funded or for which other NEPA analysis is being prepared. This approach does not meet the letter or intent of CEQ's regulations ... The analyst should develop guidelines as to what constitutes "reasonably foreseeable future actions" based on planning process within each agency ... In many cases, local government planning agencies can provide useful information on the likely future development of the region, such as Local zoning requirements, water supply plans, economic master plans. development plans, and various permitting records will help in identifying reasonably foreseeable private actions ... These plans can be considered in the analysis, but it is important to indicate in the NEPA analysis whether these plans were presented by the private party responsible for originating the action. Whenever speculative projections of future development are used, the analyst should provide an explicit description of the assumptions involved ... NEPA litigation ... has made it clear that "reasonable forecasting" is implicit in NEPA and that it is the responsibility of federal agencies to predict the environmental effects of proposed actions before they are fully known.

- o. On page 23, "Characterizing the affected environment in a NEPA analysis that addresses cumulative effects requires special attention to defining baseline conditions. These baseline conditions provide the context for evaluating environmental consequences and should include historical cumulative effects to the extent feasible.
- p. On page 29, "Lastly, trends analysis of change in the extent and magnitude of stresses in critical for projecting the future cumulative effects.
- q. On page 29, "Government regulations and administrative standards ... often influence developmental activity and the resultant cumulative stress on resources, ecosystems, and human communities.
- r. On page 31, "Cumulative effects occur through the accumulation of effects over varying periods of time. For this reason, an understanding of the historical context of effects is critical to assessing the direct, indirect, and cumulative effects of proposed actions. Trends data can be used ... to establish the baseline for the affected environment more accurately (i.e., by incorporating variation over time) ... to evaluate the significance of effects relative to historical degradation (i.e., by helping to estimate how close the resource is to a threshold of degradation) ... to predict the effects of the actions (i.e., by using the model of cause and effects established by past actions)."
- s. On pages 38-40, "Using information gathered to describe the affected environment, the factors that affect resources (i.e., the causes in the cause-and-effect relationships) can be identified and a conceptual model of cause and effect developed ... The cause-and-effect model can aid in the identification of past, present, and future actions that should be considered in the analysis ... The cause-and effect relationships for each resource are used to determine the magnitude of the cumulative effect resulting from all actions included in the analysis ... one of the most useful approaches for determining the likely response of the resource ... to environmental change is to evaluate the historical effects of activities similar to those under consideration.
- t. On page 41, "The analyst's primary goal is to determine the magnitude and significance of the environmental consequences of the proposed action in the context of the cumulative effects of other past, present, and future actions ... The critical element in this conceptual model is defining an appropriate baseline or threshold condition of the resource.
- u. On page 43, "Situations can arise where an incremental effect that exceeds the threshold of concern for cumulative effects results, not from the proposed action, but the reasonably foreseeable but still uncertain future actions.
- v. On page 45, "The significance of effects should be determined based on context and intensity ... Intensity refers to the severity of effect ... As discussed

above, the magnitude of an effect reflects relative size or amount of an effect. Geographic extent considers how widespread the effect might be. Duration and frequency refers to whether the effect is a one-time event, intermittent, or chronic.

- w. On page 45, "Determinations of significance ... are the focus of analysis because they lead to additional (more costly) analysis or to inclusion of additional mitigation (or a detailed justification for not implementing mitigation) ... the project proponent should avoid, minimize, or mitigate adverse effects by modifying alternatives ... in most cases, however, avoidance or minimization are more effective than remediating unwanted effects."
- y. On page 51, "different resource effects that cumulatively affect interconnected systems must be addressed in combination."
- 16) The Corps must include information in the EIS so the public and decision-makers will not be aware of the magnitude and significance of the proposed water conveyance structure, associated structures, and any secondary development that this proposal will promote by providing water in the Houston area. The need for this information and for an EIS is documented by the following:
- 1. CEQ NEPA Regulation, 1500.1(b), "NEPA procedures must insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA."
- 2. CEQ NEPA Regulation, 1500.1(c), "The NEPA process is intended to help public officials make decisions that are based on understanding of environmental consequences."
- 3. CEQ NEPA Regulation, 1500.2(b), "Implement procedures to make the NEPA process more useful to decision-makers and the public."
- 4. CEQ NEPA Regulation, 1500.2(d), "Encourage and facilitate public involvement in decisions which affect the quality of the human environment."
- 5. CEQ NEPA Regulation, 1500.4(b), "Preparing analytic rather than encyclopedic environmental impact statements."
- 6. CEQ NEPA Regulation, 1500.4(f), "Emphasizing the portions of the EIS that are useful to decision-makers and the public."

- 7. CEQ NEPA Regulation, 1501.2(b), "Identify environmental effects and values in adequate detail so they can be compared to economic and technical analyses."
- 8. CEQ NEPA Regulation, 1502.2, "EISs shall be analytic rather than encyclopedic."
- 9. CEQ NEPA Regulation, 1502.4(a), "Agencies shall make sure the proposal which is the subject of an EIS is properly defined."
- 10. CEQ NEPA Regulation 1502.16, "This section forms the scientific and analytic basis for the comparisons ... environmental impacts of the alternatives including the proposed action, any adverse environmental effects which cannot be avoided should the proposal be implemented, the relationship between short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and irreversible or irretrievable commitments of resources."
- 11. CEQ NEPA Regulation, 1502.21, "No material may be incorporated by reference unless it is reasonably available for inspection by potentially interested persons within the time allowed for comment."
- 12. **CEQ NEPA Regulation, 1502.24,** "Agencies shall insure the professional integrity, including scientific integrity, of the discussions and analyses in EISs. They shall identify any methodologies used and shall make explicit reference by footnote to the scientific and other sources relied upon for conclusions in the statement."
- 13. CEQ NEPA Regulation, 1506.6(a), "Agencies shall make diligent efforts to involve the public in preparing and implementing their NEPA procedures."
- 14. CEQ NEPA Regulation, 1508.3, "Affecting means will or may have an effect on."
- 15. CEQ NEPA Regulation, 1508.14, "Human Environment shall be interpreted comprehensively to include the natural and physical environment and the relationship of people with that environment ... When an EIS is prepared and economic or social and natural or physical environmental effects are interrelated then the EIS will discuss all of these effects on the human environment."
- 16. CEQ NEPA Regulation, 1508.18, "Major Federal action includes actions with effects that may be major and which are potentially subject to Federal control and responsibility. Major reinforces but does not have a meaning independent of significantly ... Actions include new and continuing activities, including projects ... approval of specific projects, such as construction or management activities located in a defined geographic area."

- 17. CEQ NEPA Regulation, 1508.27, "Significantly as used in NEPA requires considerations of both context and intensity ... Context means that the significance of an action must be analyzed in several contexts ... For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as whole ... Intensity refers to the severity of impact ... impacts may be both beneficial and adverse. A significant effect may exist even if the Federal agency believe that on balance the effect will be beneficial ... Unique characteristics of the geographic area ... The degree to which the effects on the quality of the human environment are likely to be highly controversial ... The degree to which the possible effects ... are highly uncertain or involve unique or unknown risks ... Whether the action is related to other actions with individually insignificant but cumulatively significant impacts ... Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment."
- 17) For an EIS, dictionary usage of words or phrases will not suffice to provide the public with a clear picture of what the intensity, significance, and context of environmental impacts are for the proposed water conveyance structure, associated structures, and any secondary development that this proposal will promote by providing water in the Houston area. In other words, an all qualitative assessment, analysis, and evaluation of environmental impacts is not sufficient to deal with the clearly articulated CEQ requirements in **Section 1502.14**, that the EIS "should present the environmental impacts of the proposal and the alternatives in comparative form, thus **sharply defining the issues and providing a clear basis for choice among options by the decision-maker and the public"**.
- 1. Quantitative assessment, analysis, and evaluation are necessary to ensure that alternatives and environmental impacts are clearly defined and shown in the EIS. As stated in the CEQ NEPA implementing regulations, Section 1500.1(b), Purpose, "NEPA procedures must insure that environmental information is available to public officials and citizens ... The information must be of high quality. Accurate scientific analysis ... are essential to implementing NEPA".
- 2. As stated in **Section 1501.2(b)**, "Identify environmental effects and values in adequate detail so they can be compared to economic and technical analyses."
- 3. As stated in **Section 1502.8**, "which will be based upon the analysis and supporting data from the natural and social sciences and the environmental design arts."
- 4. As stated in **Section 1502.18(b)**, about the Appendix, "Normally consist of material which substantiates any analysis fundamental to the impact statement".
- 5. As stated in **Section 1502.24**, "Agencies shall insure the professional integrity, of the discussions and analyses ... They shall identify any methodologies used

and shall make explicit reference by footnote to the scientific and other sources relied upon for conclusions in the statement."

The analysis that the Corps must conduct for this EIS is much more than "best professional judgment". "Best professional judgment" is where a group of people, using their experience, decide what is important. This level of assessment, analyses, and evaluation for environmental impacts and alternatives is an insufficient foundation upon which to base an EIS.

18) The Corps must define what phrases and words mean so that the public can review, comment on, and understand what the Corps refers to regarding this water conveyance structure, associated structures, and any secondary development that this proposal will promote by providing water in the Houston area. Decision-makers also need to know this information. The qualitative description of phrases used to describe environmental impacts or the protectiveness of an alternative does not provide the public with the degree of comparison required by the CEQ's mandatory NEPA implementing regulations. These regulations state, in **Section 1502.14**, **Alternatives including the proposed action**, that, "This section is the heart of the EIS ... it should present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decision-maker and the public ... Devote substantial treatment to each alternative in detail ... so that reviewers may evaluate their comparative merits."

The CEQ also states, in Section 1502.16 and (d), Environmental consequences, that, "This section forms the scientific and analytic basis for the comparisons ... The environmental effects of alternatives including the proposed action the comparisons under Section 1502.14 will be based on this discussion."

It is key that the Corps clearly compare and make apparent the distinctiveness of each alternative and its impacts or protectiveness. This is not accomplished when phrases are used qualitatively instead of quantitatively with more detailed and clear descriptions of qualitative information. The Sierra Club requests that the Corps clarify and detail clearly the comparative differences between each alternative and define clearly what the words or phrases used mean.

Brands Manucha

The Sierra Club appreciates this opportunity to comment. Thank you.

Sincerely,

Brandt Mannchen

Chair, Forestry Subcommittee

Houston Regional Group of the Sierra Club

5431 Carew, Houston, Texas 77096

713-664-5962, brandtshnfbt@juno.com



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6 1445 ROSS AVENUE, SUITE 1200 DALLAS, TX 75202-2733

Mr. Jayson M. Hudson Regulatory Branch, CESWG-PE-RB U.S. Army Corps of Engineers P.O. Box 1229 Galveston, Texas 77553-1229

MAY 17 2010

Re: Luce Bayou InterBasin Transfer Project

Dear Mr. Hudson:

The Environmental Protection Agency (EPA) Region 6 has reviewed Public Notice (PN) SWG-2009-00188, dated April 19, 2010. The following comments were prepared under the authority of, and in accordance with, the provisions of the Federal Guidelines (Guidelines) promulgated at 40 CFR Part 230 under Section 404(b)(1) of the Clean Water Act. We have also conducted a cursory review of the Environmental Report prepared by AECOM for the applicant, Coastal Water Authority (CWA). The proposed project starts on the Trinity River in Liberty County and discharges into the confluence of Luce Bayou with Lake Houston in Montgomery County, Texas.

The proposed project would consist of a 26.5 mile conveyance structure that consists of approximately 3 miles of pipeline (two, 108-inch diameter pipes) and approximately 23.5 miles of open clay-lined earthen canal with berms, access roads, drainage ditches, and perimeter fencing. A sedimentation basin and an approximately 20-acre sediment storage area are proposed where the pipeline transitions to the canal. The purpose of the project is to transfer raw water from the Trinity River basin to Lake Houston, a major water supply reservoir for the City of Houston.

According to the public notice and the Environmental Report, approximately 203.10 acres of waters of the US would be adversely impacted by construction of the project consisting of 200.95 acres of wetlands and 2.15 acres of rivers and streams. Approximately 118.93 acres are forested wetlands, 25.55 acres are scrub/shrub wetlands, 45.26 acres are emergent wetlands, and 11.21 acres are open water associated with wetlands. Of the 2.15 acres of streams, 0.18 acres consists of unnamed tributaries, 1.67 acres are the Trinity River, and 0.30 acres are the Lake Houston/Luce Bayou confluence.

The applicant is proposing to provide compensatory mitigation for the unavoidable loss of aquatic resources by acquiring an approximately 2,953 acre tract of land located near the Trinity River National Wildlife Refuge. The tract contains approximately 964 acres of forested wetlands, 6 acres of emergent wetlands, 25 acres of scrub/shrub wetlands, and approximately 213 acres of mixed wetlands. The mitigation lands would be deeded to the U.S. Fish and Wildlife Service.

It appears that the applicant has not adequately addressed all potential impacts of the project and/or potential alternatives that could result in further avoidance and minimization of significant impacts to the aquatic ecosystem.

EPA understands that CWA operates an existing transfer station located downstream of the proposed project (Exhibit 2-1) that currently transfers raw water from the Trinity River basin to Lake Houston. EPA requests information concerning the effect of the new transfer station on the existing station and why the existing station and conveyance system could not be upgraded to meet the water demand and further avoid and minimize impacts to the aquatic environment.

EPA is concerned that Trinity and Galveston bays and their associated estuaries could be adversely affected by the loss and reduction of freshwater inflows from the Trinity River basin. EPA requests that the applicant provide an analysis that addresses the direct, secondary, and cumulative effects on the reduction and loss of freshwater inflows from the Trinity River basin into the bays and estuaries downstream of the transfer project.

Further, the applicant should consider other viable alternatives such as a combination of hydraulic desiltation of Lake Houston and beneficial use of the dredged material to gain acre feet of storage capacity in Lake Houston, and upgrading of the existing transfer station to supply the water demand. The net gain in storage capacity and upgrading of the existing system could offset the need for a new transfer conveyance system and significant impacts to the aquatic ecosystem. Other potential alternatives may exist to offset the need for a new raw water interbasin transfer system.

EPA is concerned with the current design of an open trapezoidal ditch to convey water to Lake Houston. The applicant should consider designing a natural stable channel with an adequate forested buffer using the principles of fluvial geomorphology to convey water through a system that would function as a natural stream.

Finally, EPA is concerned with the direct, secondary, and cumulative loss of freshwater wetlands and potential impacts to the bays and estuaries from the proposed project. The proposed project impacts, when viewed in light of the total number of projects proposed and/or reasonably foreseeable within this portion of the watershed, may have a significant impact on aquatic resources in this region. Given the proposed project, the secondary impacts of the project, and likely cumulative impacts of the project, we believe the Corps of Engineers should prepare an EIS for this proposed project.

If you have any questions regarding our position in this matter, please contact Jim Herrington, of my staff, at (254) 774-6042.

Sincerely,

Sharon Fancy Parrish

Chief

Wetlands Section

cc: Moni Belton, U.S. Fish and Wildlife Service, Houston, TX
Heather Young, NMFS, Galveston, TX
Jamie Schubert, Texas Parks and Wildlife Dept, Seabrook, TX
Mark Fisher, Texas CEQ Austin, TX

/7 May 20, 2010

Carleton W. Brown U.S Army Corps of Engineers District Galveston, Texas P.O. BOX 1229 Galveston, Texas 77553-1229

Re: Public Notice No. SWG-2009-00188 Luce Bayou Interbasin Transfer Project In Liberty and Harris County, Texas

Dear Mr. Brown:

### I. Background

This letter is submitted on behalf of Richard C. Bumstead, 2345 Wolf Rd., Huffman, Texas 77336, regarding the potential security risk associated with the Coastal Water Authority, Houston, Texas, proposal to construct a water canal system on his property, located at 2345 Wolf Rd., Huffman, TX 77336-3737, which will connect the Trinity River and Lake Houston water systems to provide drinking water to the citizens of Houston, Texas.

The Coastal Water Authority proposal to construct and align the Trinity River water systems with County Rd FM 634, Huffman, Texas makes it difficult to keep this area safe and secure. The proposed location for the canal system is vulnerable to a variety of attacks including contamination with deadly agents, physical attacks-such as the release of toxic gaseous chemicals-and cyber attacks. If these attacks were realized, the result could be large numbers of illnesses or casualties and/or a denial of service that would also impact public health and economic vitality. Critical services such as firefighting and healthcare (hospitals), and other dependent and interdependent sectors, such as Energy, Transportation, and Food and Agriculture, would suffer negative impacts from a denial of Water Sector service.

## II. The Request

To ensure the City of Houston water supply infrastructure is secure and assures a steady flow of water for agriculture, industry, fire fighting and household use, I recommend the Coastal Water Authority re-align the proposed water canal system 2,000 feet to the West of County Road FM 634 (see attached Richard Bumstead proposed re-alignment canal map), which still impacts my residence, ranching operations and plat subdivision development plans. However, it will restrict vehicle and pedestrian access near the water canal and prevent terrorist from introducing chemical agents into the water supply.

THANK YOU for your attention to this matter. I look forward to hearing from you soon.

Richard & Bunstist

Richard C. Bumstead 2345 Wolf Road

Huffman, Texas 77336-3737

Cell: (281) 960-1931

Email: richbum@msn.com

RDM:rdm

Enclosures/Letter/Re-Alignment Canal Map (6)

CC: Mayor Annise D. Parker, City of Houston, Texas

CC: The Honorable Congressman Ted Poe, 2nd District of Texas, Kingwood, Texas

CC: W. Allyn Hoaglund, Hoaglund Law, Houston, Texas

Bryan W. Shaw, Ph.D., Chairman
Buddy Garcia, Commissioner
Carlos Rubinstein, Commissioner
Mark R. Vickery, P.G., Executive Director



# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

May 18, 2010

Mr. Jayson M. Hudson U.S. Army Corps of Engineers Galveston District CESWG-PE-RE P.O. Box 1229 Galveston, Texas 77553-1229

Re: USACE Permit Application Number SWG-2009-00188

Dear Mr. Hudson:

As described in the Joint Public Notice, dated April 19, 2010, the applicant, Coastal Water Authority, proposes to construct an approximate 26.5-mile pipeline and canal system to convey surface water from the Trinity River to Lake Houston. The project is located north, northwest, and west of Dayton, Liberty and Harris Counties, Texas.

As proposed, approximately 203.10 acres of jurisdictional aquatic resources would be adversely impacted by the project. Of the 203.10 acres, 200.93 acres are identified as wetlands and 2.15 acres as waters of the United States. Approximately 118.93 acres are forested wetlands, 25.55 acres are scrub/shrub wetlands, 45.26 acres are emergent wetlands, and approximately 11.21 acres are open water associated with wetlands. Of the 2.15 acres of waters of the United States, 0.18 acre is unnamed tributaries, 1.67 acres are the Trinity River, and 0.30 acre is the Lake Houston/Luce Bayou confluence.

In addition to the information contained in the public notice, the following information is needed for review of the proposed project. Responses to this letter may raise other questions that will need to be addressed before a water quality certification determination can be made.

1. Title 30, Texas Administrative Code (TAC), Chapter 279.11(c)(1), states that "No discharge shall be certified if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, . . . ." Practicable alternatives are preliminarily assumed to exist, but the applicant does have the opportunity to clearly demonstrate that no practical alternatives exist. Please have the applicant complete the enclosed 401 Tier II Questionnaire and Alternatives Analysis Checklist.

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Mr. Jayson M. Hudson U.S. Army Corps of Engineers USACE Permit Application Number SWG-2009-00188 Page 2 May 18, 2010

- 2. If the aquatic resources cannot be avoided, appropriate and practicable steps should be taken to minimize potential adverse impacts (30 TAC §279.11(c)(2)). Please provide more detailed information on what options were considered to minimize impacts and why they were eliminated.
- 3. Mitigation of impacts is considered for "... all unavoidable adverse impacts that remain after all practicable avoidance and minimization has been completed ..." (30 TAC §279.11(c)(3)). The proposed compensation for the project's unavoidable adverse impacts is the acquisition of an approximately 2,953-acre tract located within the Lower Trinity Floodplain Habitat Stewardship Program acquisition boundary for the Trinity River National Wildlife Refuge (TRNWR). It is stated in the public notice that the property will be deeded to the United States Fish and Wildlife Service (USFWS). Please have the applicant provide documentation that the property has been investigated by USFWS and USFWS has agreed to accept the mitigation property for inclusion in the TRNWR. Also, please have the applicant provide any additional details regarding the plan to provide mitigation lift and the responsibility for restoration and enhancement of functional resource values on the proposed mitigation tract.

The Texas Commission on Environmental Quality (TCEQ) looks forward to receiving and evaluating other agency or public comments. Please provide any agency comments, public comments, as well as the applicant's comments, to Mr. Robert Hansen of the Water Quality Division MC-150, P.O. Box 13087, Austin, Texas 78711-3087. Mr. Hansen may also be contacted by e-mail at *rhansen@tceq.state.tx.us*, or by telephone at (512) 239-4583.

Sincerely,

Charles W. Maguire, Director

Water Quality Division

Texas Commission on Environmental Quality

CWM/RSH/sp

Enclosure

cc: Mr. Donald Ripley, P.E., AECOM, 5757 Woodway, Suite 101 West, Houston, Texas 77057

# State Water Quality Certification of Section 404 Permits

Does your project meet Texas' water quality standards?

The Texas Commission on Environmental Quality (TCEQ) must consider this question for all proposed projects seeking a Section 404 dredge and fill permit.



One of the requirements for obtaining a Corps of Engineers Section 404 permit is certification from the TCEQ that the permit will comply with State water quality standards. This requirement is authorized by Section 401 of the Federal Clean Water Act, and is therefore referred to as 401 certification.

The attached 401 certification questionnaire must be submitted in order for the TCEQ to determine whether or not a project should be granted 401 certification. Please note that the information requested in this questionnaire is *not* required in order for a Section 404 application to be considered administratively complete by the Corps of Engineers. However, failure to provide this information (including the Alternatives Analysis Checklist) to the TCEQ (within 30 days of the public notice) may cause your project to be denied 401 certification without prejudice.

### What do you need to submit to TCEQ?

- 1. A completed 401 certification questionnaire
- 2. A completed Alternatives Analysis Checklist (if your project affects surface water in the State, including wetlands)
- 3. A map with the location of the project clearly marked (A U.S. Geological Survey (USGS) topographic map strongly recommended)
- 4. Photographs or a video cassette showing the project area and any associated disposal areas (Map and photos should be numbered to show where the photos were taken and the area covered by each photo)

#### What is involved in review of Section 401 certifications?

- 1. Filing an application with the Corps starts both the 404 permit and the 401 certification processes
- 2. A Joint Public Notice is issued by the Corps and the TCEQ after receipt by the Corps of a completed application to inform the public and other government agencies of the proposed activity
  - A 30 day comment period follows
  - The TCEQ may hold a public hearing to consider the potential adverse impacts of the proposed project on water quality
- 3. The TCEQ may request additional information from the application, persons submitting comments or requesting a hearing, or other resource agencies
- 4. A final 401 certification decision will be provided following the end of the comment period.

Revised - June 15, 2004



# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

## Tier II Alternatives Analysis Checklist

#### I. Alternatives

- A. How could you satisfy your needs in ways which do not affect surface water in the State?
- B. How could the project be re-designed to fit the site without affecting surface water in the State?
- C. How could the project be made smaller and still meet your needs?
- D. What other sites were considered?
  - 1. What geographical area was searched for alternative sites?
  - 2. How did you determine whether other non-wetland sites are available for development in the area?
  - 3. In recent years, have you sold or leased any lands located within the vicinity of the project? If so, why were they unsuitable for the project?
- E. What are the consequences of not building the project?

#### II. Comparison of alternatives

- A. How do the costs compare for the alternatives considered above?
- B. Are there logistical (location, access, transportation, etc.) reasons that limit the alternatives considered?
- C. Are there technological limitations for the alternatives considered?
- D. Are there other reasons certain alternatives are not feasible?
- III. If you have not chosen an alternative which would avoid impacts to surface water in the State, please explain:
  - A. Why your alternative was selected, and
  - B. What you plan to do to minimize adverse effects on the surface water in the State impacted.
- IV. Please provide a comparison of each criteria (from Part II) for each site evaluation in the alternatives analysis.



# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

## Tier II 401 Certification Questionnaire

The following questions seek to determine how adverse impacts will be avoided during construction or upon completion of the project. If any of the following questions are not applicable to your project, write NA ("not applicable") and continue.

Please include the applicant's name as it appears on the Corps of Engineers' permit application (and permit number, if known) on all material submitted. The material should be sent to:

Texas Commission on Environmental Quality Attn: 401 Coordinator (MC-150) P.O. Box 13087 Austin, TX 78711-3087

## I. Impacts to surface water in the State, including wetlands

- A. What is the area of surface water in the State, including wetlands, that will be disturbed, altered or destroyed by the proposed activity?
- B. Is compensatory mitigation proposed? If yes, submit a copy of the mitigation plan. If no, explain why not.
- C. Please complete the attached Alternatives Analysis Checklist.

### II. Disposal of waste materials

- A. Describe the methods for disposing of materials recovered from the removal or destruction of existing structures.
- B. Describe the methods for disposing of sewage generated during construction. If the proposed work establishes a business or a subdivision, describe the method for disposing of sewage after completing the project.
- C. For marinas, describe plans for collecting and disposing of sewage from marine sanitation devices. Also, discuss provisions for the disposing of sewage generated from day-to-day activities.

Revised - June 15, 2004

## III. Water quality impacts

- A. Describe the methods to minimize the short-term and long-term turbidity and suspended solids in the waters being dredged and/or filled. Also, describe the type of sediment (sand, clay, etc.) that will be dredged or used for fill.
- B. Describe measures that will be used to stabilize disturbed soil areas, including: dredge material mounds, new levees or berms, building sites, and construction work areas. The description should address both short-term (construction related) and long-term (normal operation or maintenance) measures. Typical measures might include containment structures, drainage modifications, sediment fences, or vegetative cover. Special construction techniques intended to minimize soil or sediment disruption should also be described.
- C. Discuss how hydraulically dredged materials will be handled to ensure maximum settling of solids before discharging the decant water. Plans should include a calculation of minimum settling times with supporting data (Reference: Technical Report, DS-7810, Dredge Material Research Program, GUIDELINES FOR DESIGNING, OPERATING, AND MAINTAINING DREDGED MATERIAL CONTAINMENT AREAS). If future maintenance dredging will be required, the disposal site should be designed to accommodate additional dredged materials. If not, please include plans for periodically removing the dried sediments from the disposal area.
- D. Describe any methods used to test the sediments for contamination, especially when dredging in an area known or likely to be contaminated, such as downstream of municipal or industrial wastewater discharges.



May 18, 2010

Jayson M. Hudson Regulatory Branch, CESWG-PE-RB U.S. Army Corps of Engineers P.O. Box 1229 Galveston, Texas 77553-1229

RE: Public Notice SWG-2009-00188

Dear Mr. Hudson:

The applicant, Coastal Water Authority, proposes to convey water from the Trinity River to Lake Houston through an approximate 26.5-mile conveyance structure. The structure would consist of approximately 3 miles of pipeline (two, 108-inch diameter pipes) and approximately 23.5 miles of a clay-lined earthen canal with berms, access road, drainage ditches, and perimeter fencing. A sedimentation basin and approximate 20-acre sediment storage are proposed where the pipeline transitions to the canal. The project, named the Luce Bayou Interbasin Transfer Project (Luce Bayou Project), is located starting on the Trinity River approximately six miles east of the intersection of FM 1008 and County Road 2317 in eastern Liberty County with the corridor extending southwestward from the Trinity River to a discharge point near the confluence of Luce Bayou with Lake Houston approximately one mile south of the bridge crossing of FM 2100 and Luce Bayou in Harris County, Texas.

Sediment pumped with the Trinity River water would be allowed to settle in the sedimentation basin and would be periodically removed so that water entering the canal would contain less sediment and thereby reduce the amount of sediment conveyed through the canal and into Lake Houston. Bawl-ground siphons and box culverts are proposed to be constructed where the canal crosses existing roads, easements or utilities and in areas that would require maintenance of existing hydrology that would otherwise be interrupted by the canal and associated structures.

The applicant identified approximately 203.10 acres of jurisdictional aquatic resources within the project footprint, of which approximately 200.95 acres consist of wetlands and 2.15 acres consist of waters of the United States. Approximately 118.93 acres are forested wetlands, 25.55 acres are scrub/shrub, approximately 45.26 acres are emergent wetlands, and approximately 11.21 acres are open water associated with wetlands. Of the 2.15 acres of waters of the United States, 0.18 acre is unnamed tributaries, 1.67 acres are the Trinity River, and 0.30 acres are the Lake Houston/Luce Bayou confluence.

That applicant states that after considering avoidance and minimization of adverse impacts to aquatic resources in accordance with the 404(b)(1) guidelines, due to the scale of the proposed project, impacts to all aquatic resources could not be avoided. Therefore, the applicant proposes

<sup>• 17330</sup> Highway 3, Webster, TX 77598 • Phone 281-332-3381 • Fax 281-332-3153 •

to compensate for unavoidable impacts by acquiring an approximately 2, 953-acre tract located within the Lower Trinity River Floodplain Habitat Stewardship Program acquisition boundary for the Trinity River National Wildlife Refuge and deeded to the U.S. Fish and Wildlife Service. The proposed mitigation site contains approximately 964 acres of forested wetlands, 6 acres of emergent wetland, 25 acres of scrub/shrub wetlands and an approximately 213 acres missed forested/emergent/scrub/shrub wetland complex.

The Galveston Bay Foundation's Wetland Permit Review Committee (WPR) has reviewed Public Notice SWG-2009-00188. We acknowledge the applicant's collaboration with the resource agencies that has resulted in the relocation of the conveyance out of Luce Bayou proper. We also acknowledge the applicant's work with the resource agencies resulting in a proposal to compensate for the unavoidable <u>direct impacts</u> to jurisdictional wetlands and waters of the U.S. by acquiring and deeding to the U.S. Fish and Wildlife Service the almost 3,000-acre Harrison mitigation tract that includes approximately 1,200 acres of wetlands. WPR is satisfied with the resulting preservation wetland mitigation ratio of 6:1 (and 8:1 for forested wetland impacts). These higher ratios are justified since the mode of mitigation is preservation.

However, we would like to note the following concerns we have with this project and some suggestions for improvement:

- 1. We understand that the applicant will enhance the project site through the cessation of cattle grazing and timber harvesting. We would like to see the applicant enhance the mitigation site further by working with the resource agencies to remove invasive species.
- 2. The protection of the mitigation site should be ensured in perpetuity through a conservation easement to be held by U.S. Fish and Wildlife Service.
- 3. Entrainment/impingement of fish and other Trinity River wildlife in the pump station apparatus. Entrained organisms could also include invasive animal species as well as invasive aquatic vegetation. The applicant should include design approaches and operational practices to minimize entrainment and impingement of fish and wildlife and to prevent the spread of invasive species to Lake Houston and the San Jacinto River.
- 4. Potential secondary impacts that this project will have on freshwater inflows to Galveston Bay and on instream flows in the Trinity River downstream of the Luce Bayou Project diversion point have not been adequately accessed. According to the 2007 Region H Water Plan, this project will divert up to 1.2 million acre-feet of water from the Trinity River by 2020. These flows would otherwise provide natural physical, chemical, and biological maintenance of downstream segments of the Trinity River and the Trinity River Delta, and would provide critical inputs of freshwater, nutrients, and sediments to Trinity Bay. While the diverted water can flow back to Galveston Bay via the San Jacinto River, there is no guarantee on the amount of water that will actually make it to the estuary due to the potential for water reuse. We recommend that the Corps postpone consideration of this application until the Texas Commission on Environmental Quality adopts Senate Bill 3-based standards for freshwater inflows to Galveston Bay and for instream flows for Trinity River by June 2011. This will allow planners to have more

PN SWG-2009-00188 Page 3

complete environmental flows needs information from which to access the effect this project will have on the ecological health of the lower reaches of the Trinity River and Trinity Bay.

Our concerns about the secondary impacts from this project, as well as those from other major State Water Plan water management strategies, will be provided in detail to the Region H Planning Group and to the Texas Commission on Environmental Quality as it develops environmental flows standards. Namely, the Galveston Bay Foundation is concerned that water conservation goals, particularly for municipal water use in the Houston and Dallas metropolitan areas, are not adequate. Robust municipal water conservation initiatives (more aptly named water efficiency initiatives), such as those that have been successfully implemented in the City of San Antonio – reducing per capita use of water use by 30% from 213 gallons per day in 1984 to 149 gallons per day in 2000, could postpone or eliminate the need for costly and potentially environmentally damaging strategies such as interbasin transfers of water and reservoir construction. Such water conservation efforts could result in an adequate supply of water for people and environmental flows that maintain a sound ecological environment in Galveston Bay, the Trinity River, and the San Jacinto River.

Thank you for the opportunity to comment on this application. Please contact me at (281) 332-3381 x209 or sjones@galvbay.org if you have any questions.

Sincerely,

Scott A. Jones

Environmental Policy and Outreach Specialist

The Galveston Bay Foundation

cc:

TCEQ – 401 Program

**TPWD** 

**TGLO** 

**USFWS** 

**NMFS** 

U.S. EPA



# United States Department of the Interior FISH AND WILDLIFE SERVICE

Division of Ecological Services 17629 El Camino Real #211 Houston, Texas 77058-3051 281-286-8282 FAX: 281-488-5882



May 19, 2010

Colonel David C. Weston Galveston District, Corps of Engineers Attn: Regulatory Branch, Jayson Hudson P.O. Box 1229 Galveston, Texas 77553-1229

#### Dear Colonel Weston:

Reference is made to the public notice for Department of the Army Permit SWG-2009-00188, dated April 19, 2010 and the Environmental Report dated March 2010. The applicant, Coastal Water Authority, proposes to convey of water from the Trinity River to Lake Houston. The project, known as the Luce Bayou Interbasin Transfer Project, will transfer water via an approximate 26.5-mile conveyance system that would consist of pipelines, a canal system with berms, access roads, drainage ditches, and perimeter fencing. Also proposed is a sedimentation basin and sediment storage area at the pipeline/canal transition area. The project begins at the Trinity River in Liberty County, with the corridor extending southward to Lake Houston in Harris County, Texas.

The revised Department of the Interior Manual Instructions (503 DM 1), dated August 3, 1973, assign responsibility for Department of the Interior coordination and review of Department of the Army permit applications to the U.S. Fish and Wildlife Service (Service). Our comments are provided in accordance with these instructions and with the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661, et seq.), with the provisions of the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) and the Migratory Bird Treaty Act (40 Stat. 755, as amended; 16 U.S.C. 703 et seq.).

Canal System, Pipeline Corridor, Compressor Stations, and Metering Facilities, Pump Stations: We recommend that all bright lighting associated with above ground structures such as the proposed sediment basins, sediment storage, transmission lines, siphon crossings and associated facilities be downshielded to significantly reduce disturbance to resident and migratory birds and other resident wildlife. In addition, security lighting for on-ground facilities and equipment should be down-shielded to keep light within the boundaries of the each site.

**Utility Corridors:** All utility lines, including electrical transmission lines, associated with this project should be included in the project description. Habitat impacts associated with utility corridor installation should be determined and included in the project plans. Alternatives should be considered for power lines, such as underground installation, to decrease the threat to migratory and resident birds. Migratory birds (e.g., waterfowl, shorebirds, passerines, hawks, owls, vultures, falcons) are afforded protection under the Migratory Bird Treaty Act (40 Stat. 755; 16 U.S.C. 703-712).



Colonel David C. Weston ATTN: Regulatory Branch, Jayson Hudson Permit SWG-2009-00188 May 19, 2010 Page 2

**Sediment Basins**: Additional information is needed on the location and size of the sediment basin and storage areas. In addition, please provide a long term management plan for these sites.

Wildlife Restrictions: Fencing is proposed for the entire length of the canal system. It is not clear if any fencing will be within the proposed mitigation site or if it will continue along each of the existing crossing and proposed siphon structures. Please identify where breaks may occur in the fencing for wildlife crossings. As discussed in previous meetings, we recommend that fencing be limited and/or restricted within the proposed mitigation site in order to reduce impacts to wildlife.

**Invasive Species Control:** An invasive species control plan should be developed for the entire project. Long-term control, which may be a minimum of 10 years, may be needed in relatively undisturbed areas, such as the forested areas along the Trinity River and within Luce Bayou adjacent to Lake Houston.

Compensatory Mitigation: The Service fully supports the proposed mitigation site and current plans to incorporate it as part of the Trinity River National Wildlife Refuge. However, the following recommendations should be incorporated into the mitigation plan:

An invasive species control plan should be developed for areas that are proposed to be disturbed
by the construction of the pump station, pipeline corridor, transmission line corridor, access roads
and any other areas that may be disturbed during construction activities.

 The property should be transferred to the Trinity River National Wildlife Refuge within 180 days of permit issuance.

Additional information, as described above, is needed to continue our evaluation and adequately review the project's impacts. As the project continues to develop, the Service may request other information in order to make recommendations for the protection of fish and wildlife in the area. Also, additional meetings may be needed with the applicant, the applicant's representatives, and the Corps to further discuss project impacts and complete the compensatory mitigation plan.

Thank you for the opportunity to comment on this project. If you need any additional information, please contact Moni Belton or Catherine Yeargan at 281/286-8282.

Sincerely,

Stephen D. Parris

Field Supervisor, Clear Lake ES Field Office

May 19, 2010

Jayson M. Hudson

Regulatory Branch, CESWG-PE-RB

U.S. Army Corps of Engineers P.O. Box 1229 Galveston, Texas 77553-1229

RE: Public Notice SWG-2009-00188

Dear Mr. Hudson:

This letter provides my comments related to the above-referenced permit application, currently being considered by the U.S. Army Corps of Engineers Galveston District. I am an environmental scientist and attorney with over 20 years experience in the Houston area. I am a regular user of the Trinity River between Lake Livingston and Trinity Bay, for kayaking, birding and nature study.

In preparing my comments I have reviewed the Public Notice, dated April 19, 2010 and the provided plans and specifications for the project. I have also made recent field visits to the project vicinity on the Trinity River.

#### Mitigation Plan Does Not Result in No Net Loss

The applicant identified approximately 203.10 acres of jurisdictional aquatic resources within the project footprint, of which approximately 200.95 acres consist of wetlands and 2.15 acres consist of waters of the United States. Approximately 118.93 acres are forested wetlands, 25.55 acres are scrub/shrub, approximately 45.26 acres are emergent wetlands, and approximately 11.21 acres are open water associated with wetlands. Of the 2.15 acres of waters of the United States, 0.18 acre is unnamed tributaries, 1.67 acres are the Trinity River, and 0.30 acres are the Lake Houston/Luce Bayou confluence.

The applicant proposes to compensate for these unavoidable impacts by acquiring an approximately 2, 953-acre tract located within the Lower Trinity River Floodplain Habitat Stewardship Program acquisition boundary for the Trinity River National Wildlife Refuge and deeding this to the U.S. Fish and Wildlife Service. The proposed mitigation site contains approximately 964 acres of forested wetlands, 6

acres of emergent wetland, 25 acres of scrub/shrub wetlands and an approximately 213 acres mixed forested/emergent/scrub/shrub wetland complex. This provides an approximate 6:1 mitigation ratio for the project impacts to all waters of the U.S., including an approximate 8:1 mitigation ratio for the impacts to forested wetlands.

The proposed mitigation plan appears to be an offer of straight preservation. While the ratio is generous and I certainly am supportive of any addition of high quality habitat to the Trinity River National Wildlife Refuge, straight preservation should not be allowed unless there is a demonstrable, unregulated threat to the aquatic resources to be preserved. If the threat is demonstrated, then a higher ration of preservation would be acceptable as mitigation. The applicant has not provided any information demonstrating that such a threat exists and that their mitigation would result in avoidance of such an unregulated threat.

The applicant should either demonstrate conclusively that such a threat exists or should compensate through restoration, enhancement or other means to assure that there is no net loss of functional values. As it stands, the mitigation proposal is simply a nicely packaged loss of 203.10 acres of jurisdictional waters and the functional values they provide.

## The Applicant has not Addressed the Impacts to the Trinity River or Galveston Bay from Alteration of Flows

The applicant has made an effort through their mitigation plan, to address the direct impacts of their project to the waters of the United States. The mitigation plan does not address the impacts to the aquatic resources of the Trinity River and Galveston Bay that would result from the reduction of freshwater flows in the river and into Trinity Bay. This should be fully evaluated and understood, through the EIS process prior to any permit being issues for this project.

In addition to the reduction in flows in the Trinity River, and the reduced freshwater flows into Trinity Bay, it is my understanding that all return flows will be through the existing area waste water treatment facilities, which would involve the transference of this freshwater inflow to the San Jacinto, and not into Trinity Bay as it is currently. My understanding of the underlying 1964 water withdrawal permit is that this could be up 400,000 acre feet per day, if the full allocation were used. The effects of this transfer of inflows is not discussed at all nor are the effects of it quantified and considered in preparing the applicants mitigation plan. These effects need to be evaluated, quantified, and if appropriate, mitigated.

The USACE Galveston District Needs to Prepare an Environmental Impact Statement Prior to Ruling on this Permit Application

This project clearly will result in significant impacts to the human environment. The information provided in the Public Notice states that it may affect listed threatened or endangered species, that it may affect cultural resources eligible for listing on the National Register of Historic places, and that it will result in the loss of 203.10 acres of jurisdictional waters of the United States. At this point in the process there also appear to be substantial unquantified and unidentified impacts associated with the project. Since there is real potential for environmental controversy over the effects of this project on the human environment, as well as demonstrated significant effects from the know impacts, the USACE Galveston District should prepare an environmental impact statement prior to making any decision on the issuance of this permit.

Based on the above reasons, I request that the U.S. Army Corps of Engineers, Galveston District not rule on this permit until an EIS is prepared. Should the Corps decide to proceed with this application, I request that a public hearing be held to allow all parties to be fully heard.

Very truly yours,

Bruce R. Bodson

4426 Lakeshore Forest Drive

Missouri City, Texas 77459

#### Hudson, Jayson M SWG

From:

Heather Young [Heather.Young@noaa.gov]

Sent: To: Monday, May 24, 2010 4:27 PM Hudson, Jayson M SWG

Subject:

SWG-2009-00188 Coastal Water Authority

The NOAA's National Marine Fisheries Service has reviewed the project plan advertised in the following public notice. However, because of our current workload, our biologists are unable to adequately investigate this application. Therefore, we are taking no action on this permit application.

Notice: SWG-2009-00188

Applicant: Coastal Water Authority

Notice date: 04-19-2010



Life's better outside."

May 26, 2010

Mr. Jayson Hudson Regulatory Branch U.S. Army Corps of Engineers P.O. Box 1229 Galveston, Texas 77553-1229

Mr. Mark Fisher, 401 Coordinator Mail Code 150 TCEQ P.O. Box 13087 Austin, Texas 73711-3087

Commissioners

Peter M. Holt Chairman San Antonio

T. Dan Friedkin Vice-Chairman Houston

Mark E. Bivins Amarillo

Ralph H. Duggins Fort Worth

Antonio Falcon, M.D. Rio Grande City

> Karen J. Hixon San Antonio

Dan Allen Hughes, Jr. Beeville

> Margaret Martin Boerne

S. Reed Morian Houston

Lee M. Bass Chairman-Emeritus Fort Worth Re:

Permit Application Number SWG-2009-00188 Coastal Water Authority

Permit application number SWG-2009-00188, dated April 19, 2010, proposes to construct a water conveyance system from the Trinity River to Lake Houston. This system will include three miles of pipeline (two 108-inch pipes) and 23.5 miles of clay-lined earthen canal. This project will also include the construction of a sedimentation basin, a 20-acre sediment storage area, access roads, drainage ditches and perimeter fencing. Approximately 203 acres of jurisidictional aquatic habitats would be impacted by this proposed project. To compensate for unavoidable impacts, the applicant is proposing to preserve a 2,953-acre tract located within the Lower Trinity River Floodplain Habitat Stewardship project boundary of the Trinity River National Wildlife Refuge (TRNWR). This tract will be deeded to the TRNWR. This tract contains 964 acres of forested wetlands, six acres of emergent wetlands, 25 acres of scrub/shrub wetlands, and 213 acres of mixed emergent-forested-scrub/shrub wetland complex. The project is located in Liberty and Harris counties, Texas.

Carter P. Smith Executive Director Please be aware that a written response to a Texas Parks and Wildlife Department recommendation or informational comment received by a state governmental agency on or after September 1, 2009 may be required by state law. For further guidance, please see Texas Parks & Wildlife Code Section 12.0011 at the following website: http://www.statutes.legis.state.tx.us/Docs/PW/htm/PW.12.htm.

The applicant has engaged in extensive coordination and negotiations with Texas Parks and Wildlife Department (TPWD) and other resource agencies. This coordination has resulted in avoidance of impacting Luce Bayou that the proposed compensatory mitigation plan will adequately compensate for unavoidable impacts to aquatic resources. However, TPWD still has three outstanding concerns that should be addressed prior to issuance of this permit.

The first issue is that logging has occurred on the preservation tract in the past year. TPWD is aware that this logging has been halted; however, TPWD has never been made aware of the extent of the logging. TPWD requests that the applicant provide a restoration plan to restore the impacted habitat. This should include a reforestation plan and an invasive species control plan. Invasive species to be controlled should include but not be limited to Chinese tallow (*Triadica sebifera*) and deep-rooted sedge (*Cyperus entrerianus*).

Mr. Hudson Mr. Fisher Page 2 of 2 May 26, 2010

The second issue of concern to TPWD is the impact of water withdrawal from the Trinity River. Low flows between Lake Livingston and Caper's Ridge will likely be increased by this project. Releases from Lake Livingston destined for the proposed project will tend to drop the stage of Lake Livingston, resulting in more storage capacity in the lake that will be available to capture large inflows. Thus the higher end of the hydrograph will be somewhat diminished downstream of Livingston due to this project. Downstream of Caper Ridge both high and low flows would likely be decreased. While this water transfer is permitted by an existing water right, the impacts of this hydrologic change should be evaluated to fully evaluate the potential impacts of this project on aquatic resources.

Finally, TPWD is concerned that the 26-mile conveyance system will essentially form a continuous barrier to wildlife limiting wildlife movement north and south of the project. Wildlife will be forced to move north and south at road crossings. This will increase wildlife mortality through wildlife/vehicle collisions. The applicant should incorporate wildlife crossings into the project plans that facilitates north and south movement by mammals, reptiles and amphibians away from road crossings.

Texas Parks and Wildlife Department requests that the applicant address the above listed concerns and to continue to coordinate with Department personnel to ensure that these issues are adequately addressed. Due to these outstanding concerns, TPWD requests that this permit not be issued as presented in the project plans.

Questions can be directed to Mr. Jamie Schubert at (281) 534-0135 in Dickinson, Texas.

Sincerely,

Rebecca Hensley

Regional Director, Ecosystem Resources Program

Science and Policy Branch Coastal Fisheries Division

**WJS** 

#### **Scoping Period Comments**

#### May 25, 2011 — July 29, 2011

#### **Comments Received During the 2011 Scoping Commenting Period**

Professor Paul Friesema, Northwestern University, May 25, 2011

Brandt Mannchen, Sierra Club, June 8, 2011

Brian Van Zee, Texas Parks & Wildlife Department, June 21, 2011

Dr. Benjamin Tuggle, US Fish and Wildlife Service, July 21, 2011

Brandt Mannchen, Sierra Club, July 23, 2011

Attached Article provided by Sierra Club: Meador, Michael R. 1992. Inter-basin Water Transfer: Ecological Concerns. *Fisheries*. March-April, 1992. Vol. 17, No. 2 p 7-22

Comment Sheet from Floyd and Gail Page, July 25, 2011

Charrish Stevens, US Fish and Wildlife Service, July 27, 2011

Rebecca Hensley, Texas Parks & Wildlife Department, July 28, 2011

David McCullough, property owner, August 2, 2011

#### Hudson, Jayson M SWG

From: Paul Friesema [pfree@northwestern.edu]
Sent: Wednesday, May 25, 2011 2:51 PM

To: Hudson, Jayson M SWG

Subject: Luce Bayou Interbasin Transfer Project EIS

Hello Jayson. Please put me on the mailing list to receive scoping announcements and summaries, and documents for the entire NEPA process for the Luce Bayou Interbasin Transfer Project. Please send paper copies of material to:

Professor Paul Friesema

Environmental Policy and Culture Program

227 Scott Hall, Northwestern University Evanston, IL.60208-1006

#### Thank you! Paul

Department of the Army; Corps of Engineers

Public Scoping Meeting and Preparation of Environmental Impact Statement for Luce Bayou Interbasin Transfer Project in Liberty County and Harris County, TX

AGENCY: Department of the Army, U.S. Army Corps of Engineers, DoD.

ACTION: Notice of intent.

SUMMARY: The U.S. Army Corps of Engineers, Galveston District, has received a permit application for a Department of the Army Permit pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C.

403) and Section 404 of the Clean Water Act (33 U.S.C. 1344) from the Coastal Water Authority (SWG-2009-00188) for the proposed Coastal Water Authority's Luce Bayou Interbasin Transfer Project located in eastern Liberty County with the 26.5-mile corridor extending southwestward from the Trinity River to a discharge point near the confluence of Luce Bayou with Lake Houston. The primary Federal involvement associated with the proposed action is the discharge or dredged or fill material into waters of the United States, including jurisdictional wetlands, and the construction of structures that may affect navigable waters. Federal authorizations for the proposed project would constitute a `major federal action.'' Based on the potential impacts, both individually and cumulatively, the Corps intends to prepare an Environmental Statement (EIS) in compliance with the National Environmental Policy Act to render a final decision on the permit applications.

The Corps' decision will be to either issue, issue with modification or deny Department of the Army permits for the proposed action. The EIS will assess the potential social, economic and environmental impacts of the construction and operation of the interbasin conveyance, associated facilities, and appurtenances and is intended to be sufficient in scope to address Federal, State and local requirements, environmental issues concerning the proposed action, and permit reviews.

DATES: The scoping period will commence with the publication of this notice. The formal scoping period will end 60 days after the publication of this notice. Comments regarding issues relative to the proposed project should be received.

ADDRESSES: You may submit comments by any of the following methods:

Mail: Jayson M. Hudson, U.S. Army Corps of Engineers, Regulatory Branch, P.O. Box 1229,

Galveston, TX 77553-1229; Fax: (409) 766-3931 or

E-mail: <u>Jayson.m.hudson@usace.army.mil</u>. Emailed comments, including attachments, should be provided in .doc, .docx, .pdf or .txt formats.

Documents pertinent to the proposed project may be examined at

http://www.swg.usace.army.mil/reg/eis.asp.



Houston Regional Group P. O. Box 3021 Houston, Texas 77253-3021 713-895-9309 http://texas.sierraclub.org/houston/

Mr. Jayson M. Hudson Regulatory Branch, CESWG-PE-RB Galveston District U.S. Army Corps of Engineers P.O. Box 1229 Galveston, Texas 77553-1229

Texas Commission on Environmental Quality (TCEQ) 401 Coordinator MSC-150 P.O. Box 13087 Austin, Texas 78711-3087

Dear Mr. Hudson and TCEQ,

Enclosed are the scoping comments of the Houston Regional Group of the Sierra Club (Sierra Club) regarding the U.S. Army Corps of Engineers (Corps), Galveston District, Section 10/404 Permit Application No. SWG-2009-00188, scoping notice that the Sierra Club received on May 26, 2011 for the proposed construction by the Coastal Water Authority (CWA) of a 26.5 mile water conveyance structure and the requirement by the National Environmental Policy Act (NEPA) for an environmental impact statement (EIS).

The proposal will start at the Trinity River about six miles east of the intersection of FM 1008 and County Road 2317 in eastern Liberty County, ultimately going in a southwest direction to discharge near the confluence of Luce Bayou and Lake Houston, about one mile south of the FM 2100 bridge crossing and Luce Bayou in Harris County. The proposal includes:

1. A new 90-acre water pumping station that will be constructed on the Trinity River a Capers Ridge which is about 10 miles north of Dayton, Texas with a 2.4 mile long 80-foot right-of-way (ROW) asphalt access road (25 acre ROW) and another 2.5 miles of road in the Harrison Tract. This pumping station has a diversion structure that contains a trash rack, headwall, concrete slope, sluice gate, intake structure, and riprap.

About 330 cubic yards of concrete slope protection (headwall and toe) will be installed; 470 cubic yards of backfill will be placed below the ordinary high water mark – OHWM; 1,100 cubic yards of material will be excavated below the OHWM to construct the pump station and place the concrete slope protection and headwall; 7,600 cubic yards of riprap will be placed below the OHWM of the

Trinity River, and 6,000 cubic yards of material will be excavated below the OHWM of the Trinity River.

- 2. 3.5 miles of two 108 inch diameter pipelines will go west and southwest to outfall in a sedimentation basin.
- 3. A 20 acre sedimentation settling and storage basin.
- 4. A 23.5 mile clay-lined earthen canal with 4:1 side slopes, 20-foot wide bottom section, seven feet deep, top banks 100 feet apart, in a 300 foot easement that includes access roads, berms, chain link perimeter fencing, flow control structures, and metering stations. This canal and the 108 inch diameter pipelines will move 400-500 million gallons per day (MGD) (775 cubic feet per second cfs) of water from the Trinity River Watershed to Lake Houston in the San Jacinto River Watershed.
- 5. Box culverts at the canal and roadway crossings and multiple bawl-ground siphons to facilitate wildlife movement and maintain existing hydrology along the canal conveyance system.
- 6. A 10-acre maintenance facility about 6 miles north of Dayton, Texas.
- 7. A discharge structure along the southeastern shoreline of Lake Houston with a transition to a box culvert about 700 feet east of the discharge location on Luce Bayou with three 6-foot by 8-foot concrete box culverts that would discharge below the ordinary high water mark (OHWM). About 975 cubic yards of riprap will be placed below the OHWM.
- 8. Associated revetments, armor stones, rip rap, water control gates, access roads, outfalls, swales, grates, mowed grass right-of-ways, drainage ditches, perimeter fences, sedimentation basin, and 20 acre sediment storage. Clearing an approximately 300 foot right-of-way (ROW) is required which includes about 1,050 acres in Liberty and Harris Counties.
- About 203.10 acres of jurisdictional aquatic resources will be destroyed.
- About 200.95 acres of wetlands and 2.15 acres of waters of the United States will be destroyed.
- 11. About 118.93 acres of the 200.95 acres of wetlands are forested wetlands, 25.55 acres are scrub/shrub wetlands, 45.26 acres are emergent wetlands, and 11.21 acres are open water wetlands will be destroyed.
- 12. Of the waters of the United States 0.18 acres are unnamed tributaries, 1.67 acres are the Trinity River, and 0.30 acres are Lake Houston/Luce Bayou confluence.

- 13. About 2,953 acres within the Lower Trinity River Floodplain Habitat Stewardship Program acquisition boundary for the Trinity River National Wildlife Refuge (TRNWR) will be acquired for mitigation. Of the 2,953 acres, 964 acres are forested wetlands, 6 acres are emergent wetlands, 25 acres are scrub/shrub wetlands, and 213 acres are mixed forested/emergent/scrub/shrub wetlands.
- 1) The Sierra Club supports and applauds the Corps decision to prepare an EIS for this proposal. This proposal is a "major federal action significantly affecting the quality of the human environment." The Sierra Club comments in this letter document this fact.
- 2) There is a contradiction between the Notice of Intent and the Luce Bayou Interbasin Transfer Project Description. On page 2 of the Notice of Intent, 400 MGD is used as the conveyance water volume that will be transferred while on page A-1 of the Project Description, Summary, the figure used is 500 MGD.

The EIS must clearly state what the conveyance water volume will be and then determine the environmental impacts that this amount of diverted water will have on instream flows, Galveston Bay Estuary, a portion of the Galveston Bay Estuary (for example, Trinity Bay), and the landscape/ecosystems in the watersheds that will provide or receive this water.

For cumulative impacts, the EIS must state what the conveyance water volume will be, including any possible expansion possibilities beyond 400-400 MGD due to the acquisition or use of additional water rights from the Trinity River or other sources of surface or groundwater. For instance, there is a proposal to transfer a very large volume of water from the Sabine River to Lake Livingston via canal or pipeline. This project has been described as a water management strategy in the Region H and Region I Water Plans. The cumulative impacts of connecting these diversions must be addressed in the EIS. The public needs this information so that it can review, comment on, and understand all of the environmental impacts of this proposal.

- 3) The loss of water due to seepage, infiltration, evaporation, and other water losses must be analyzed and estimated in the EIS. This helps determine and reveals the environmental impacts of the proposal as well as the social and financial impacts. The public needs this information so that it can review, comment on, and understand all of the environmental impacts of this proposal.
- 4) Page 4, Notice of Intent, 3. Purpose and Need, the phrase "surrounding area" is used with regard to where the water will go that is conveyed by this proposal. This phrase must be defined so the public will understand the

magnitude and extent of the area that this proposal will provide water to with regard to cumulative environmental impacts. The public needs this information so that it can review, comment on, and understand all of the environmental impacts of this proposal.

- 5) Page 5, Notice of Intent, 5. Public Involvement, this part of the public notice talks about "public benefit and needs of the people". It is important to note that not implementing this proposal also has public benefit and needs and that for each alternative the public benefit and needs may be different and must be identified in the EIS. The reason that there is a public benefit for not implementing the proposal is that all environmental, social, and financial impacts will be avoided if the proposal is not implemented and most of the environmental, social, and financial impacts that additional growth in population and development that are caused by this proposal will be avoided. The avoidance of these environmental, social, and financial impacts is considerable and significant. The public needs this information so that it can review, comment on, and understand all of the environmental impacts of this proposal.
- 6) Page 5, Availability of the Draft EIS, the Sierra Club requests that it be notified about any public meetings or hearings that deal with this proposal. In addition, the Sierra Club strongly encourages the Corps to give the public at least 4 weeks of notice before holding any public meeting or hearing about this proposal. This longer lead time than the two weeks the Corps proposes is needed since people are so busy that they need advanced lead time to schedule and prepare for any public meeting or hearing. It makes sense that any public meeting or hearing that is held on the DEIS occur late in the comment period so that the public has time to read the EIS before the public meeting or hearing. The Sierra Club urges the Corps to provide from 60-90 days of public comment period on the DEIS due to the significant and complicated nature of this project and the substantial size that the DEIS will be.
- 7) Page A-1, Project Description, Summary, here the canal is described as entering Lake Houston on the "northeastern shoreline." However, page 3, Notice of Intent, 1. Project Background, the discharge structure is described as being along the "southeastern shoreline of Lake Houston." Which description is correct? The public needs this information so that it can review, comment on, and understand all of the environmental impacts of this proposal.
- 8) Page A-1, Project Description, Summary, the DEIS must provide the source of electric power for the pump station. For cumulative environmental impacts, the amount of each air pollutant emitted should be provided. For example, nitrogen oxides (NO2); carbon monoxide (CO); volatile organic compounds (VOC); sulfur dioxide (SO2); mercury (Hg); other metals; and radioactive elements.

- 9) Page A-1, Project Description, Summary, the Corps should require that the DEIS have an analysis about how this proposal will be affected by climate change or affect ecosystems' ability to adapt to climate change and a plan to deal with these effects. Climate change will alter existing ecosystems and make it more difficult for plants and animals to adapt successfully to these changed ecosystems. The analysis and plan should address questions like:
- How will this proposal be affected by or exacerbate climate change?
- 2. What can be done to create more resilient and resistant habitats and ecosystems?
- 3. What can this proposal do to reduce CO2 or other greenhouse gas emissions within the area where this proposal has environmental effects?
- 4. What can be done to assist plants and animals so they can adapt to climate change?

The Corps should require the preparation and include in this permit proposal a climate change ecological resilience and resistance plan as part of mitigation required for environmental impacts. This plan would assess the biological and ecological elements in the area where this proposal has environmental effects and the effects that climate change has had and will have on these biological and ecological elements. The plan would also assist plants, animals, and ecosystems in adapting to climate change and would require monitoring of changes and mitigation measure effectiveness. The plan would be based on:

- 1. Protecting existing functioning ecosystems in the area where this proposal has environmental effects.
- 2. Reducing stressors on the ecosystems in the area where this proposal has environmental effects.
- 3. Restoring natural functioning ecological processes in the area where this proposal has environmental effects.
- Using natural recovery in the area where this proposal has environmental effects, in most instances.
- 5. Acquiring buffers and corridors to expand and ensure connectivity of ecosystems in the area where this proposal has environmental effects.
- 6. Intervening to manipulate (manage) ecosystems in the area where this proposal has environmental effects only as a last resort.

- 10) Page A-1, Project Description, Summary, there is no discussion about the impact of this proposal on mineral rights for all lands in this proposal, including mineral rights. The public needs this information so that it can review, comment on, and understand all of the environmental impacts of this proposal.
- 11) Page A-1, Project Description, Summary, the phrase "Houston metropolitan area" is used. This phrase must be defined so the public will understand the magnitude and extent of the area that this proposal will provide water to with regard to cumulative environmental impacts. In addition, the "water supplies required by existing water supply contracts" and "necessary water supplies to meet contracted demands identified by the City of Houston" must be fully explained in the DEIS so the full environmental impacts of these decisions are clearly elucidated. This project description sounds like a justification for the project by the applicant and not a factual description of the project. The public needs this information so that it can review, comment on, and understand all of the environmental impacts of this proposal.
- 11) Page A-2, 2.0 Need for and Purpose of the Project, various phrases are used including "project growth and increased water demands vital to sustaining the long-term economic health of the Houston metropolitan are and surrounding communities"; "meet the projected water demands"; "to increase available water supplies to comply with contracted, future demands identified by the City of Houston"; "meet the anticipated water demands based on population projections"; and "to increase treated water supplies to comply with contracted future demands identified by the City of Houston".

These phrases must be defined so the public understands what they mean. In addition, these phrases indicate that the applicant is attempting to justify the project instead of providing a factual project description. The cumulative environmental impacts should include a discussion of how building to the "projected, estimated, anticipated growth" often creates a self-fulfilling prophesy of need for water.

The DEIS should address how much population growth and economic development is sustainable given the limited water resources that we have. A carrying capacity analysis is needed to determine our population and growth limits so that we have a sustainable Quality of Life.

The Sierra Club is very concerned that the project description preordains what the population will be in the future. Population projections are the very foundation of all planning, including water use, in Texas. The DEIS should reveal what more than doubling the population will mean for Houston area residents, their children, and grandchildren regarding air quality, water quality, noise, light pollution, traffic congestion, green space and parks, farmland, social services, quality of life, etc.

In particular, when the project description states "sustaining the long-term economic health of the Houston metropolitan area and surrounding communities" needs to be fully explained. What does "sustainability" really mean in this context? The Houston area is already above its carrying capacity. This is reflected individually and cumulatively by the following:

- 1. For air quality, the Houston area exceeds the ozone National Ambient Air Quality Standard
- For water quality, many bayous and other streams exceed their water quality standards
- 3. For water absorption capacity, major floods occur every year
- 4. For transportation, congestion is found on most major roads
- 5. For groundwater capacity, there are falling groundwater levels in many places, activated faults, and subsidence
- 6. For surface water capacity, overuse of surface water has led to importation of surface water across river basins (watersheds)
- 7. For protected park and ecological lands, Houston is far below standards for park acreage/1,000 people
- 8. For farmland, farmland use and acreage is decreasing in most counties
- 9. For quiet, noise barriers are being erected on many highways
- 10. For wildlife habitat, wetlands acreage is decreasing

The DEIS must address the problem of the Houston area exceeding its carrying capacity and how this relates to sustainability of the area with this proposed project.

There are many public policy questions that must be answered by the DEIS. Some of these include:

- 1. What population do we want?
- 2. What population can we handle (so we do not exceed natural carrying capacities)?
- 3. Is growth in population good or bad?
- 4. Do we need growth in population?

- 5. Why do we need growth in population?
- 6. How much population growth should we have?
- 7. What quality of population growth do we want?
- 8. What can we do to reduce population growth?
- 9. Why don't we reduce population growth?
- 10. How much immigration is good?
- 11. How much immigration is bad?
- 12. How can we control population growth?
- 13. How can we implement family planning?
- 14. What level of economic growth do we want?
- 15. What level of economic growth do we need?

Without an explanation in the DEIS on these and other questions, the population projections presented are a **fait acompli** and Houstonians are not allowed a fair opportunity to voice what they want via the public comment period.

It seems obvious that the long planning time frame for water projects cause projects to be built on speculation. This speculation in population growth and water use will then become fact. The fact that there are existing inter-basin water transfers between the San Jacinto, Brazos, and Trinity Rivers does not mean that this strategy should continue. When a population seeks water outside of the watershed it lives in then it has already exceeded the carrying capacity of that watershed and that population is already greater than it should be.

The human population carrying capacity of the Trinity and San Jacinto River Basins must be revealed in the DEIS, taking into account protecting sensitive areas and ecosystem needs, and then the proposal should reveal whether it exceeds the population projection.

The DEIS should state whether the environment will be degraded that we rely on for all of our needs. If this occurs then we degrade our quality of life and reduce the carrying capacity for humans and especially for those who live after us. We reduce their options as we mandate water use now. We bring ourselves closer to ecological overshoot or collapse by not recognizing that humans are animals too and we are dependent on the same ecological principles as every other living

- organism. The public needs this information so that it can review, comment on, and understand all of the environmental impacts of this proposal.
- 12) Page A-3, Project Description, Site Analysis and Site Description, the DEIS must discuss how seasonality of water, availability of water in the backwaters, flora, fauna, cypress regeneration, erosion, and flood patterns will be affected by the proposal. The public needs this information so that it can review, comment on, and understand all of the environmental impacts of this proposal.
- 13) Page A-3, Project Description, 3.1 Project Components, the DEIS must address, via analysis, evaluation, and assessment, how fragmentation of the landscape will affect each different species of plants and animals (both vertebrate and invertebrate), streams, and ecosystems. The number of streams that will be crossed must be revealed, along with their ecological and biological characteristics and how these will be affected by the proposal. The public needs this information so that it can review, comment on, and understand all of the environmental impacts of this proposal.
- 14) Page A-4, Project Description, 3.1.1 Wetland Systems, all non-jurisdictional wetlands must be identified and their area determined and the DEIS must describe what will happen to each of these wetlands. The public needs this information so that it can review, comment on, and understand all of the environmental impacts of this proposal.
- 15) Page A-4, Project Description, 3.1.1 Wetland Systems, the DEIS must address how each type of wildlife (vertebrate and invertebrate) will be able to cross the proposed ROW and to what degree mitigation measures will work. Monitoring of these mitigation measures to determine their effectiveness and readdressing monitoring and mitigation measures to make sure that they are effective for wildlife crossings must be required. The public needs this information so that it can review, comment on, and understand all of the environmental impacts of this proposal.
- 16) Page A-4, Project Description, 3.1.5 Lake Houston Near Luce Bayou, the DEIS must address how recreation, like canoeing, kayaking, hiking, fishing, and other recreational pursuits will be affected by the proposal and what mitigation measures will be required and what their effectiveness is. The public needs this information so that it can review, comment on, and understand all of the environmental impacts of this proposal.
- 17) Page A-5, Project Description, 3.1.6 Temporary Construction Impacts at the Trinity River and Lake Houston, the DEIS must specifically describe the temporary construction equipment and methods that will be used; what the environmental impacts are of each piece of equipment and method; and which construction equipment and methods have the least environmental impacts. The

public needs this information so that it can review, comment on, and understand all of the environmental impacts of this proposal.

- 18) Page A-6, Project Description, Land Use Compatibility, the DEIS must compare the proposal to the canal and drainage network for irrigation or draining of agricultural fields to document the statement that "LBITP canal would be a feature on the landscape somewhat similar to the existing agricultural ditches and canals that currently exist" with regard to environmental impacts and characteristics. The public needs this information so that it can review, comment on, and understand all of the environmental impacts of this proposal.
- 19) Page A-6, Project Description, Land Use Compatibility, the DEIS must address exotic species (plant and animal); their potential introduction; their environmental impacts; the mitigation measures that could be used to address environmental impacts if exotic species are introduced; mitigation measures for the proposal which will prevent introduction of exotics; and the effectiveness of each mitigation measure. The public needs this information so that it can review, comment on, and understand all of the environmental impacts of this proposal.
- 20) Sheet 4 of 44, Project Planview and Wetland Impacts, Wetland Name 1-7, says Trinity River. What is not clear by this designation is whether this wetland deals with the river itself or also the riparian corridor that is along the river. The public needs this information so that it can review, comment on, and understand all of the environmental impacts of this proposal.

Also, when the Resource/Wetland Type is named Forested Mosaic what exactly does this mean? Is the non-wetland part of Forested Mosaic treated as a wetland or has it been removed so that it is not reflected under the Area column? How does the non-wetland part of Forested Mosaic affect the wetland part? The public needs this information so that it can review, comment on, and understand all of the environmental impacts of this proposal.

21) Sheet 5 of 44, Caper's Ridge Pump Station Site Plan, where will the electrical power come from that runs the proposal? What environmental impacts occur due to the generation of this electrical energy? What direct and indirect air pollution will be emitted by this proposal, including the pumping station? The public needs this information so that it can review, comment on, and understand all of the environmental impacts of this proposal.

Under Notes, 2., the proposal states "Actual area required for sediment storage will depend on the final design of the intake structure, pump selection, and sediment extraction system." Are there any pollutants in the sediment? If so, what are those pollutants and what concentrations are they found in? What effect will dredging of sediments to be used for the intake structure have on fish and other aquatic organism spawning areas, fish cover areas, and other fish

habitat? The public needs this information so that it can review, comment on, and understand all of the environmental impacts of this proposal.

- 22) Sheet 8 of 44, Caper's Ridge Pump Station Slope Protection Alternative, what type and amount of erosion occur at the Trinity River intake structure? What type of impingement and entrapment will occur at the intake points? What aquatic species will be affected? What is the impact on boating, canoeing, and kayaking? How will this type of environmental damage be mitigated?
- 23) Sheets 9, 10, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 28, 29, 30, and 32 of 44, Project Planview and Wetland Impacts, do any of Wetlands A, B, K, M, N, O, Q, S, U, 6.22, 6.24, 6.26, 6-27, AA, X, Y, W, AA, GG, HH, II, 6-01, 6-04, 6-05, 6-06, 6-10, 6-12, 6-14, 6-15, 6-16, 6-17, 6-18, 6-19, 6-20, 6-22, 7-01, 7-04, 7-07, 7-11, 7-13, 7-19, 7-22, 7-23, 7-31, 7-44, 7-49, 7-54, 7-58, 7-60, 7-62, 7-64, 7-66, 7-68, 7-72, 7-73, 7-76, 7-77, P09-01, P10-01, 8-05, 8-09, 8-11, 8-16, 8-18, 8-19, 8-23, 8-24, 8-25, 8-26, 8-28, P12-01, P12-02, P14-01, P16-01, P17-01, P17-02, P19-01, P19-02, P22-01, 14-1, 41-01, 41-03, 41-05, 41-06, 41-04, 42-01, 42-03, P43-01, P43-02, 43-1, 43-6, 43-7, 43-11, 44-8, 50-2, 51-1, 52-2, 52-3, 52-6, 52-8, 52-10, 52-11, 52-13, and 54-1 lie outside the ROW boundaries? If so, how much of each wetland (area) lies outside the ROW boundaries? What environmental impacts will occur to remnant wetlands that lie outside the ROW boundaries when the rest of the wetlands are destroyed? The Corps should state that 267 individual wetlands will be destroyed by this proposal. The public needs this information so that it can review, comment on, and understand all of the environmental impacts of this proposal.

Will the Corps consider an alternative that places the two pipelines under the ROW access road so that the environmental impacts to wetlands that lie both inside and outside the ROW are reduced? Sheet 11 of 44 documents that Wetlands G, F, and H can be avoided if the pipelines are placed under the ROW access road.

For Wetland H, which lies outside where the pipeline will be buried, what activities in the ROW may affect this wetland and how can the environmental impacts of those activities be eliminated or minimized (mitigation measures)? What kinds of environmental impacts may affect Wetland H?

Since the ROW access road is not water dependent, what will be done to minimize, by avoidance, the impacts of the road (for instance, spanning the wetlands) or to mitigate for those impacts? The public needs this information so that it can review, comment on, and understand all of the environmental impacts of this proposal.

What environmental impacts will mowing have over the entire length of the proposal on wetlands that lie within the ROW but are not destroyed by construction (like Wetland H)? What mitigation measures will be implemented

that reduce mowing impacts on wetlands? The public needs this information so that it can review, comment on, and understand all of the environmental impacts of this proposal.

- 24) Sheets 10, 12, 13, and 32 of 44 show that Drainages CC, P, X, BB, 52-1, and 53-1 are crossed. However, there is no documentation which tells a person what the name of the drainage is. The public needs this information so that it can review, comment on, and understand all of the environmental impacts of this proposal.
- 25) Cumulative impacts for this proposal are the key to determining what the total potential environmental impacts will be. Cumulative impacts will be massive since they are the result of the provision of water for hundreds of thousands to millions of people plus all the residential, commercial, institutional, and industrial development that will be constructed to support the settlement of this many people.

Such cumulative impacts cannot be denied since the Coastal Water Authority (CWA), in essence for the City of Houston, has stated in the project description that the proposal is needed for "project growth and increased water demands vital to sustaining the long-term economic health of the Houston metropolitan area and surrounding communities"; and to "meet the projected water demands"; and "to increase available water supplies to comply with contracted, future demands identified by the City of Houston"; and to "meet the anticipated water demands based on population projections"; and "to increase treated water supplies to comply with contracted future demands identified by the City of Houston".

Since the City of Houston must comply with contracted future demands identified by the City of Houston" these are not speculative cumulative impacts and are all a part of past, present, and future foreseeable actions and environmental impacts that this proposal will have. Since the proposal is based upon population projections (which are not given in the scoping notice but must be in the DEIS) then it should be simple to determine the approximate area in acreage that may be developed to accommodate the increase in population that population projections assume.

The Corps and the applicant should look to the Region H Water Planning Group's 2011 Region H Water Plan (the Luce Bayou Project is an integral part of this plan) for specific information and figures to determine what environmental impacts will be for the Luce Bayou Project. The Region H website (<a href="http://regionhwater.org">http://regionhwater.org</a>) has all the information to allow estimates of what development will occur via use of water use information from Water User Groups (WUGs).

The Region H Water Plan has information on description of region; population and water demands; analysis of current water supplies; presentation of water management strategies based on needs; impacts of management strategies on water quality and impacts of moving water from rural and agricultural areas; water conservation and drought management plans; long term protection of the state's water resources, agricultural resources and natural resources; ecologically unique stream segments, unique reservoir sites and legislative recommendations; water infrastructure financing; and public participation in developing the 2011 Region H Water Plan. There is no reason that a reasonable estimate of cumulative environmental impacts (based upon population increases and development that occurs from these increases that are made possible by the water made available by the Luce Bayou Project) for the Luce Bayou Project cannot be determined using the Region H Water Plan and other sources of information.

For instance, in the Executive Summary of the Region H Water Plan, page ES-3, Region H will grow from 6 million people in 2010 to 11.3 million people in 2060. There 10 year population projections that can be used as estimates if the 50 year future projection is deemed too distant for "future foreseeable" actions and cumulative environmental impacts. On page ES-5, water demand will increase in from 2.38 million acre-feet/year in 2010 to 3.52 acre-feet/year in 2060. On page 2-59 of the RHWP, for Harris County alone, the acre-feet figures are:

2010 - 1,130,740 2020 - 1,255,987 2030 - 1,363,515 2040 - 1,470,305 2050 - 1,575,123 2060 - 1,663,105

So the applicant and the Corps can determine via the amount of water that will be delivered each year the approximate population and development that this generates and supports. This cumulative environmental impacts analysis must be in the DEIS and include the direct and indirect environmental impacts that are generated by delivering this amount of water.

The Sierra Club requests that the Corps fully examine all cumulative impacts due to this water conveyance structure, associated structures, and any secondary development that this proposal will promote by providing water in the Houston area in the DEIS. The cumulative impacts of all past, present, and future foreseeable actions must be identified and their impacts must be assessed, analyzed, and evaluated. The cumulative impacts analysis in the EIS must comply with the Council on Environmental Quality (CEQ) NEPA implementing regulations, 40 CFR 1502.16, 1508.7, 1508.8, 1508.25, and 1508.27.

In addition, the Corps must consider cumulative impacts when looking at public interest review factors in 33 CFR 320-332, like conservation, air quality, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs safety, food and fiber production, mineral needs and, in general, the needs and welfare of the people.

The CEQ has extensively described the minimum requirements for analysis and mitigation of cumulative impacts on environmental quality. At minimum, an adequate cumulative effects analysis must:

- Identify the past, present, and reasonably foreseeable actions of the Corps and other parties affecting each particular aspect of the affected environment
- 2. Must provide quantitative information regarding past changes in habitat quality and quantity, water quality, resource values, and other aspects of the affected environment that are likely to be altered by Corps actions
- Must estimate incremental changes in these conditions that will result from Corps actions in combination with actions of other parties, including synergistic effects
- 4. Must identify any critical thresholds of environmental concern that may be exceeded by Corps actions in combination with actions of other parties
- 5. Must identify specific mitigation measures that will be implemented to reduce or eliminate such effects

The Corps must use the CEQ's January 1997 document, "Considering Cumulative Effects Under the National Environmental Policy Act" for determining cumulative impacts and carrying out its analysis, assessment, and evaluation. It is clear that the Corps has an affirmative duty, a statutory duty, and a regulatory duty to carry out cumulative impacts assessment.

### Some of the especially important quotes from the CEQ document include:

- a. On page v, "Only by reevaluating and modifying alternatives in light of the projected cumulative effects can adverse consequences be effectively avoided or minimized. Considering cumulative effects in also essential to developing appropriate mitigation and monitoring its effectiveness."
- b. On page v, "By evaluating resource impact zones and the life cycle of effects rather than projects, the analyst can properly bound the cumulative effects analysis. Scoping can also facilitate the interagency cooperation needed to

identify agency plans and other actions whose effects might overlap those of the proposed action."

- c. On page vi, "When the analyst describes the affected environment, he or she is setting the environmental baseline and thresholds of environmental change that are important for analyzing cumulative effects. Recently developed indicators of ecological integrity (e.g., index of biotic integrity for fish) and landscape conditions (e.g., fragmentation of habitat patches) can be used as benchmarks of accumulated change over time ... GIS technologies provide improved means to analyze historical change in indicators of the condition of resources, ecosystems, and human communities, as well as the relevant stress factors.
- d. On page vi, "Most often, the historical context surrounding the resource is critical to developing these baselines and thresholds and to supporting both imminent and future decision-making."
- e. On page ... the consequences of human activities will vary from those that were predicted and mitigated ... therefore, monitoring the accuracy of predictions and the success of mitigation measures is critical.
- f. On page vi, "Special methods are also available to address the unique aspects of cumulative effects, including carrying capacity analysis, ecosystem analysis, economic impacts analysis, and social impact analysis.
- g. On page vii, Table E-1, "CEA Principles ... Cumulative effects analysis ...Address additive, countervailing, and synergistic effects ... Look beyond the life of the action.
- h. On page 1, "The range of actions that must be considered includes not only the projects proposal but all connected and similar actions that could contribute to cumulative effects.
- i. On page 3, "The purpose of cumulative effects analysis, therefore is to ensure that federal decisions consider the full range of consequences of actions ... If cumulative effects become apparent as agency programs are being planned or as larger strategies and policies are developed then potential cumulative effects should be analyzed at that times.
- j. On page 3, Cumulative effects analysis necessarily involves assumptions and uncertainties, but useful information can be put on the decision-making table now ... Important research and monitoring programs can be identified that will improve analyses in the future, but their absence should not be used as a reason for not analyzing cumulative effects to the extent possible now ... adaptive management provisions for flexible project implementation can be incorporated into the selected alternative."

- k. On page 4, "The Federal Highway Administration and state transportation agencies frequently make decisions on highway projects that may not have significant direct environmental effects, but that may induce indirect and cumulative effects by permitting other development activities that have significant effects on air and water resources at a regional or national scale, The highway and other development activities can reasonably be foreseen as "connected actions."
- I. On page 7, "Increasingly, decision makers are recognizing the importance of looking at their projects in the context of other development in the community or region (i.e., of analyzing the cumulative effects) ... Without a definitive threshold, the NEPA practitioner should compare the cumulative effects of multiple actions with appropriate national, regional, state, or community goals to determine whether the total effect is significant ... Cumulative effects results from spatial (geographic) and temporal (time) crowding of environmental perturbations. The effects of human activities will accumulate when a second perturbation occurs at a site before the ecosystem can fully rebound from the effect of the first perturbation."
- m. On page 8, Table 1-2, lists 8 principles of cumulative effects analysis. See copy enclosed.
- n. On page 19, "The first step in identifying future actions is to investigate the plans of the proponent agency and other agencies in the area. Commonly, analysts only include those plans for actions which are funded or for which other NEPA analysis is being prepared. This approach does not meet the letter or intent of CEQ's regulations ... The analyst should develop guidelines as to what constitutes "reasonably foreseeable future actions" based on planning process within each agency ... In many cases, local government planning agencies can provide useful information on the likely future development of the region, such as Local zoning requirements, water supply plans, economic master plans. development plans, and various permitting records will help in identifying reasonably foreseeable private actions ... These plans can be considered in the analysis, but it is important to indicate in the NEPA analysis whether these plans were presented by the private party responsible for originating the action. Whenever speculative projections of future development are used, the analyst should provide an explicit description of the assumptions involved ... NEPA litigation ... has made it clear that "reasonable forecasting" is implicit in NEPA and that it is the responsibility of federal agencies to predict the environmental effects of proposed actions before they are fully known.
- o. On page 23, "Characterizing the affected environment in a NEPA analysis that addresses cumulative effects requires special attention to defining baseline conditions. These baseline conditions provide the context for evaluating

environmental consequences and should include historical cumulative effects to the extent feasible.

- p. On page 29, "Lastly, trends analysis of change in the extent and magnitude of stresses in critical for projecting the future cumulative effects.
- q. On page 29, "Government regulations and administrative standards ... often influence developmental activity and the resultant cumulative stress on resources, ecosystems, and human communities.
- r. On page 31, "Cumulative effects occur through the accumulation of effects over varying periods of time. For this reason, an understanding of the historical context of effects is critical to assessing the direct, indirect, and cumulative effects of proposed actions. Trends data can be used ... to establish the baseline for the affected environment more accurately (i.e., by incorporating variation over time) ... to evaluate the significance of effects relative to historical degradation (i.e., by helping to estimate how close the resource is to a threshold of degradation) ... to predict the effects of the actions (i.e., by using the model of cause and effects established by past actions)."
- s. On pages 38-40, "Using information gathered to describe the affected environment, the factors that affect resources (i.e., the causes in the cause-and-effect relationships) can be identified and a conceptual model of cause and effect developed ... The cause-and-effect model can aid in the identification of past, present, and future actions that should be considered in the analysis ... The cause-and effect relationships for each resource are used to determine the magnitude of the cumulative effect resulting from all actions included in the analysis ... one of the most useful approaches for determining the likely response of the resource ... to environmental change is to evaluate the historical effects of activities similar to those under consideration.
- t. On page 41, "The analyst's primary goal is to determine the magnitude and significance of the environmental consequences of the proposed action in the context of the cumulative effects of other past, present, and future actions ... The critical element in this conceptual model is defining an appropriate baseline or threshold condition of the resource.
- u. On page 43, "Situations can arise where an incremental effect that exceeds the threshold of concern for cumulative effects results, not from the proposed action, but the reasonably foreseeable but still uncertain future actions.
- v. On page 45, "The significance of effects should be determined based on context and intensity ... Intensity refers to the severity of effect ... As discussed above, the magnitude of an effect reflects relative size or amount of an effect. Geographic extent considers how widespread the effect might be. Duration and

frequency refers to whether the effect is a one-time event, intermittent, or chronic.

- w. On page 45, "Determinations of significance ... are the focus of analysis because they lead to additional (more costly) analysis or to inclusion of additional mitigation (or a detailed justification for not implementing mitigation) ... the project proponent should avoid, minimize, or mitigate adverse effects by modifying alternatives ... in most cases, however, avoidance or minimization are more effective than remediating unwanted effects."
- y. On page 51, "different resource effects that cumulatively affect interconnected systems must be addressed in combination."
- 26) The public notice does not state what ecosystems are found within this length of Luce Bayou, what their present condition is, what their condition will be after the proposal is built, and what the environmental impacts are of putting huge quantities of water into an existing natural stream.

Some impacts could include scouring of banks, soil erosion, sedimentation of aquatic habitats, submergence of habitats, artificially keeping water levels high in Luce Bayou and therefore altering the hydrology, hydro-period or seasonality, and frequency of inundation, etc. All of this needs to be detailed but there is nothing in this public notice that acknowledges and addresses this issue via mitigation and the opportunity for public comment. This information is needed by the public and decision-makers, via a public review and comment process, so that they can review, comment on, and understand the proposal and its full environmental impacts.

27) It is obvious that this water conveyance structure, associated developments, and any secondary development that this proposal will promote by providing water to the Houston area (like northern Harris County, southern Montgomery County, and other counties farther west) will alter overland flows, drainages, and flatwoods. How much alteration occurs, how much area is affected, how it will be affected, and how wetlands outside the ROW (north, south, east, and west) and their hydrology and drainage will be affected is not stated.

It appears that some of the streams that may be affected by alterations in hydrology, drainage, and wetlands functions include Luce Bayou, Cedar Bayou, Long John Creek Gillen Bayou, East Fork of Cedar Bayou, Tanner Bayou, Davis Bayou in addition to adjacent and nearby flatwoods. As required by the Compensatory Mitigation for Losses of Aquatic Resources, 33 CFR Part 332, rules, stream restoration via rehabilitation of ecological function is needed as mitigation for this proposal. This information is needed by the public and decision-makers, via a public review and comment process, so that they can review, comment on, and understand the proposal and its full environmental impacts.

28) If the Clean Water Act means anything then non-water dependent actions that destroy natural ecosystems and their birth places, wetlands, should not be approved for destruction and degradation via Section 10/404 permits. What is sacred and how can the natural water cleansing ability of streams be protected if the wetlands along the stream are destroyed or degraded?

This proposal does not comport with Section 404(b)(1) guidelines, which are mandatory for the Corps to follow as part of the implementation strategy that the Clean Water Act requires. Section 404(b)(1) guidelines require that non-water dependent actions must not be permitted to destroy wetlands which are "special aguatic sites".

Practicable alternatives do exist as shown on **sheet 2 of 44.** However these alternatives are not explained, their environmental impacts are not stated, there is no comparison of environmental impacts between these alternatives and the proposed action, and no mitigation requirements are presented for these alternatives. The alternative shown on **sheet 2 of 44,** which begins at the existing Trinity River Pump Station and appears to cover a shorter distance than the proposed alternative but the public cannot determine the comparative advantages or disadvantages because these are not explained in the public notice. This information is needed by the public and decision-makers, via a public review and comment process, so that they can review, comment on, and understand the proposal and its full environmental impacts.

This practicable alternative is "available and capable of being done after taking into consideration cost, existing technology and logistics in light of overall project purposes." In addition, as required by the Section 404(b)(1) guidelines, "If it is otherwise a practicable alternative an area not presently owned by the applicant which could reasonably be obtained, utilized, expanded or managed in order to fulfill the basic purpose of the proposed activity may be considered".

There is no convincing documentation in the permit application public notice that shows that the applicant cannot construct this water conveyance structure, associated developments, and any secondary development that this proposal will promote in the Houston area without destroying or degrading nearby wetlands. This type of analysis has not been included in the public notice.

As the Corps knows the presumption is that practicable alternative sites exist in the Section 404(b)(1) guidelines "unless clearly demonstrated otherwise". No such "clearly demonstrated" analysis is provided in the public notice. There is no alternatives analysis provided. This information is needed by the public and decision-makers, via a public review and comment process, so that they can review, comment on, and understand the proposal and its full environmental impacts.

29) The permit notice and notice of intent are inadequate as a basis for determining the full environmental impacts of this proposal and the effect that this proposal will have on the public interest review factors in 33 CFR 320-332, regulatory programs of the Corps, and other pertinent laws, regulations, and executive orders.

The Corps should require that a DEIS be produced which accurately assesses, analyzes, and evaluates all the environmental impacts on the "human environment." The Corps must take a "hard" look and make the EIS its own and not simply agree with the FEIS because another federal agency prepared it but must make the FEIS its own before endorsing and tiering to the FEIS. The loss of wetlands, increased water quality effects, alteration of floodplain values and functions, and other environmental impacts trigger the "major federal action significantly affecting the quality of the human environment" requirement of the NEPA and the need for an EIS. The Corps should understand that this proposal is potentially a 26.5 mile hard structure that could alter regionally hydrology over a large area.

Some of the public interest review factors that must be considered and are relevant include conservation, economics, aesthetics, air quality, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, and the needs and general welfare of the people.

The public interest factors analysis is very important and is separate and larger than simply reviewing the proposed dredge/fill impacts and proposed mitigation. The Corps should prepare its analysis of public interest factors carefully when reviewing this proposal.

30) The Corps of Engineers Compensatory Mitigation for Losses of Aquatic Resources regulations states "332.1(d) Public interest. Compensatory mitigation may also be required to ensure that an activity requiring authorization under section 404 of the Clean Water Act and/or sections 9 or 10 of the Rivers and Harbors Act of 1899 is not contrary to the public interest."

The mitigation of wetlands lost due to this proposal and this water conveyance structure, associated developments, and any secondary development that this proposal will promote in the Houston area may be in the public interest if the applicant buys mitigation lands are provides them to the U.S. Fish and Wildlife Service (FWS) and the TRNWR and other appropriate mitigation is required. This cannot be done however there is no analysis provided to the public and decision-makers which shows how compensation and mitigation ratios were determined and whether this is adequate for the purposes of Section 404 and the mitigation rules that the Corps must use. It is not clear whether the at least 964 acres that will be part of the 300 foot ROW has been mitigated for appropriately

in addition to the restoration of watershed, drainage, and hydrological features for streams, flatwoods, swales, sloughs, and other water features that may be affected by this proposal either directly or indirectly.

It is in the public interest to support the existence and continued flourishing of bottomland hardwood forested and riparian wetlands due to their high woody plant and animal bio-diversity. In Texas, calculations in the early 1990's stated that only 60% of such habitats remained from pre-settlement days.

Using bottomland hardwood forested wetlands in the Trinity River Floodplain as mitigation is good and we support the acquisition of the almost 3,000 acres of Trinity River Floodplain that will be given to the FWS for management as part of the TRNWR. But to ensure that out-of-ecosystem location and out-of-watershed mitigation is fully provided for additional mitigation should be required within the San Jacinto River Watershed in addition to that proposed for the Trinity River Watershed. Such an action ensures that protection of a sustainable portion of the San Jacinto River Bottomland Ecosystem is assured. After all, under 332.1(a), Purpose and General Considerations, it states that the rules must "provide for regional variations in wetland conditions, functions, and values" and this is done when mitigation is conducted in the Trinity River and San Jacinto River Watersheds.

The Sierra Club recommends that the same 10:1 wetlands mitigation ratio be used (which we support) for direct and indirect environmental impacts for mitigation in the San Jacinto River Watershed as was used for the Trinity River Watershed. This is predicated on the increasing rarity of bottomland hardwood forested and riparian wetlands due to their significant losses since pre-settlement times. An increasing portion of the bottomland hardwood forested and riparian wetland ecosystems are being fragmented and developed into commercial, residential, and industrial establishments. The time is now to save a sustainable portion of the San Jacinto River Watershed and Trinity River Watershed.

Under 332.3 General compensatory mitigation requirements, (a) General considerations, (1), the rules state "When evaluating compensatory mitigation options, the district engineer will consider what would be environmentally preferable. In making this determination, the district engineer must assess the likelihood for ecological success and sustainability, the location of the compensation site relative to the impact site and their significance within the watershed, and the costs of the compensatory mitigation project." This type of evaluation suits protection of wetlands in the Trinity River Watershed via the TRNWR and the San Jacinto River Watershed via the Legacy Land Trust's efforts to protect bottomland hardwood forested wetlands.

The mitigation rules in 332.3(b)(1), go on to state that "In general, the required compensatory mitigation should be located within the same watershed as the

impact site, and should be located where it is most likely to successfully replace lost functions and services, taking into account such watershed scale features as aquatic habitat diversity, habitat connectivity, relationships to hydrologic sources (including the availability of water rights), trends in land use, ecological benefits, and compatibility with adjacent land uses."

This echoes and supports why the San Jacinto River Watershed should be the location for compensatory mitigation along with the Trinity River Watershed. 332.3(b)(1) does not require the District Engineer to prefer the use of mitigation banks but says "shall consider the type and location options in the order presented in paragraphs (b)(2) through (b)(6)." In other words there is no requirement that mitigation banks be used.

The mitigation rules in 332.3 go on to state in (c) Watershed approach to compensatory mitigation, (1), "The district engineer must use a watershed approach to establish compensatory mitigation requirements in DA permits to the extent appropriate and practicable. Where a watershed plan is available, the district engineer will determine whether the plan is appropriate for use in the watershed approach for compensatory mitigation. In cases where the district engineer determines that an appropriate watershed plan is available, the watershed approach should be based on that plan. Where no such plan is available, the watershed approach should be based on information provided by the project sponsor or available from other sources. The ultimate goal of a watershed approach is to maintain and improve the quality and quantity of aquatic resources within watersheds through strategic selection of compensatory mitigation sites.

#### (2) Considerations.

(i) A watershed approach to compensatory mitigation considers the importance of landscape position and resource type of compensatory mitigation projects for the sustainability of aquatic resource functions within the watershed. Such an approach considers how the types and locations of compensatory mitigation projects will provide the desired aquatic resource functions, and will continue to function over time in a changing landscape. It also considers the habitat requirements of important species, habitat loss or conversion trends, sources of watershed impairment, and current development trends, as well as the requirements of other regulatory and non-regulatory programs that affect the watershed, such as storm water management or habitat conservation programs. It includes the protection and maintenance of terrestrial resources, such as non-wetland riparian areas and uplands, when those resources contribute to or improve the overall ecological functioning of aquatic resources in the watershed. Compensatory mitigation requirements determined through the watershed approach should not focus exclusively on specific functions (e.g., water quality or habitat for certain species), but should provide, where practicable, the suite of functions typically provided by the affected aquatic resource.

- (ii) Locational factors (e.g., hydrology, surrounding land use) are important to the success of compensatory mitigation for impacted habitat functions and may lead to siting of such mitigation away from the project area. However, consideration should also be given to functions and services (e.g., water quality, flood control, shoreline protection) that will likely need to be addressed at or near the areas impacted by the permitted impacts.
- (iii) A watershed approach may include on-site compensatory mitigation, off-site compensatory mitigation (including mitigation banks or in-lieu fee programs), or a combination of on-site and off-site compensatory mitigation.
- (iv) A watershed approach to compensatory mitigation should include, to the extent practicable, inventories of historic and existing aquatic resources, including identification of degraded aquatic resources, and identification of immediate and long-term aquatic resource needs within watersheds that can be met through permittee-responsible mitigation projects, mitigation banks, or in-lieu fee programs. Planning efforts should identify and prioritize aquatic resource restoration, establishment, and enhancement activities, and preservation of existing aquatic resources that are important for maintaining or improving ecological functions of the watershed. The identification and prioritization of resource needs should be as specific as possible, to enhance the usefulness of the approach in determining compensatory mitigation requirements.
- (v) A watershed approach is not appropriate in areas where watershed boundaries do not exist, such as marine areas. In such cases, an appropriate spatial scale should be used to replace lost functions and services within the same ecological system (e.g., reef complex, littoral drift cell)."

Because of the importance of the San Jacinto River Watershed to the City of Houston and surrounding communities with regard to water quality and flooding the mitigation by acquisition of bottomland hardwood forested or riparian wetlands along the San Jacinto River and its tributaries should be accomplished as part of this proposal.

- 31) Financial assurances have been poorly addressed in the proposal. Under Subpart J Compensatory Mitigation for Losses of Aquatic Resources, 230.91, Purpose, adequate wetland mitigation requires sufficient financial assurances. Such financial assurances have not been addressed in the public notice for this proposal and must be. The public needs this information so it can review, comment on, and understand the full environmental impacts of this proposal.
- 32) Buffers have not been addressed in the proposal. Under 33 CFR part 332, buffers, which include upland, wetland, and or riparian areas that protect and or enhance aquatic resource functions associated with wetlands, rivers, streams, etc., must be provided for as well as functional capacity (the degrees an area of aquatic resource performs a specific function). Although uplands are provided at the mitigation site at the Trinity River nowhere else are they

mentioned or mitigation provided in the public notice and none have been provided for in the San Jacinto River Watershed.

How to address drainages, overland flow through flatwoods, and other poorly drained areas due to this proposal and its cumulative impacts as well as protecting the ecological and hydrological connections and benefits they have needs to be addressed for both the San Jacinto River Watershed and the Trinity River Watershed. The public needs this information so it can review, comment on, and understand the full environmental impacts of this proposal.

33) The quantification of water pollution from this water conveyance structure, associated structures, and any secondary development that this proposal will promote by providing water in the Houston area is not found in the public notice. The applicant ignores and does not quantify the amount and type of water pollutants that will be generated by the proposal and any secondary development that occurs due to making water available.

According to "Road Ecology, Science and Solution," by Forman, et. al., Island Press, 2003, pages 201-223, "Major sources of roadside pollutants are vehicles, roads and bridges, and dry and wet (dust and rain) atmospheric Localized, less-frequent sources include spills of oil, gasoline (petrol), industrial chemicals, and other substances, and losses of materials in accidents involving vehicles and roadside structures. In addition, objects discarded from vehicles accumulate along many roads. Roadway maintenance practices, such as sanding and de-icing road surfaces and applying herbicides to roadsides, usually add pollutants. Also, both the road surface and the tires rolling on it gradually degrade ... One assessment of chemicals found along roads indicates that 19 of the 23 important pollutants (83%) come from vehicles ... Thus one-third (35%) of the types of roadside pollutants come from oil, grease, and hydraulic fluids, Engine and parts wear produces 30% of the pollutant types; metal plating and rust, 22%; tire wear, 22%; fuel and exhaust, 22%; and brake lining wear, 17%. Sanding and de-icing agents produced onefifth (22%) of the pollutant types; roadbed and road surface wear, 17%; and herbicide and pesticide use, 13%. These figures do not include heavy metals and other chemicals that leach from bridges into streams and other water bodies. In short, chemical pollutants along roads originate from diverse sources, and even significantly reducing a single pollutant would normally require control of a number of the sources."

The public notice provides no quantification of water pollutants from the proposal, associated structures, and induced development due to the provision of water in the Houston area. Since the water provided by this proposal will allow development and growth in many parts of the Houston area it is only fair that the impacts on undeveloped lands that this proposal could have via secondary development be analyzed. The water quality impacts of the proposal and the secondary development that may result from the proposal should be analyzed

and provided in the public notice. The public needs this information so it can review, comment on, and understand the full environmental impacts of this proposal.

- 34) There is nothing in the public notice which talks about the impacts that this water conveyance structure, associated structures, and any secondary development that this proposal will promote by providing water in the Houston area will have on wildlife. The Sierra Club is concerned about fragmentation of habitat and increased roadkill of wildlife due to the construction of this water conveyance structure, associated structures, and any secondary development that this proposal will promote by providing water (with additional roads and possible roadkill) in the Houston area. The public needs this information so it can review, comment on, and understand the full environmental impacts of this proposal.
- 35) The Corps must acknowledge and analyze the economic impacts that this water conveyance structure, associated structures, and any secondary development that this proposal will promote by providing water in the Houston area has in relation to environmental impacts. This includes the qualitative and quantitative impacts on flooding and water quality in the area including long-term environmental impacts that this proposal will have. The NEPA requires such analysis as follows:
- 1. Section 101(a) of the NEPA states, "The Congress, recognizing the profound impact of man's activity on the interrelations of all components of the natural environment, particularly the profound influences of population growth, high-density urbanization, industrial expansion, resource exploitation, and new and expanding technological advances ... to use all practicable means and measures, including financial and technical assistance, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans."
- Section 101(b)(5) of the NEPA states, "achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities".
- 3. Section 102(1)(B) of the NEPA states, "... which will insure that presently unquantified environmental amenities and values may be given appropriate consideration in decision-making along with economic and technical considerations".
- Section 102(1)(C) of the NEPA states, "... major Federal actions significantly affecting the quality of the human environment". (what is economics but a part of the human environment)

- Section 201(2) of the NEPA states, "current and foreseeable trends in the quality, management and utilization of such environments and the effects of those trends on the social, economic, and other requirements of the Nation".
- Section 201(3) of the NEPA states, "the adequacy of available natural resources for fulfilling human and economic requirements of the National in the light of expected population pressures".
- Section 202 of the NEPA states, "to be conscious of and responsive to the scientific, economic, social, esthetic, and cultural needs and interests of the Nation".
- 8. Section 204(4) of the NEPA states, "to develop and recommend to the president national policies to foster and promote the improvement of environmental quality to meet the conservation, social, economic, health, and other requirements and goals of the Nation".
- Section 1501.2(b) of CEQ NEPA regulations states, "Identify environmental effects and values in adequate detail so they can be compared to economic and technical analyses."
- 10. Section 1508.8(b) of CEQ NEPA regulations states, "... Effects includes ecological ... aesthetic, historic, cultural, economic, social or health, whether direct, indirect, or cumulative".
- 11. **Section 1508.14** of CEQ NEPA regulations states, "... This means that economic or social effects are not intended by themselves to require preparation of an environmental impact statement. When an environmental impact statement is prepared and economic or social and natural or physical environmental effects are interrelated, then the environmental impact statement will discuss all of these effects on the human environment".

Without a full accounting of the economic and environmental costs the Corps will not be integrating all the costs of the water conveyance structure, associated structures, and any secondary development that this proposal will promote by providing water in the Houston area and providing that information to the public for its review and comment about all costs and benefits of the proposal.

36) The Corps must include information in the EIS so the public and decision-makers will not be aware of the magnitude and significance of the proposed water conveyance structure, associated structures, and any secondary development that this proposal will promote by providing water in the Houston area. The need for this information and for an EIS is documented by the following:

- 1. CEQ NEPA Regulation, 1500.1(b), "NEPA procedures must insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA."
- CEQ NEPA Regulation, 1500.1(c), "The NEPA process is intended to help public officials make decisions that are based on understanding of environmental consequences."
- 3. CEQ NEPA Regulation, 1500.2(b), "Implement procedures to make the NEPA process more useful to decision-makers and the public."
- 4. CEQ NEPA Regulation, 1500.2(d), "Encourage and facilitate public involvement in decisions which affect the quality of the human environment."
- 5. CEQ NEPA Regulation, 1500.4(b), "Preparing analytic rather than encyclopedic environmental impact statements."
- 6. CEQ NEPA Regulation, 1500.4(f), "Emphasizing the portions of the EIS that are useful to decision-makers and the public."
- 7. CEQ NEPA Regulation, 1501.2(b), "Identify environmental effects and values in adequate detail so they can be compared to economic and technical analyses."
- 8. CEQ NEPA Regulation, 1502.2, "EISs shall be analytic rather than encyclopedic."
- 9. CEQ NEPA Regulation, 1502.4(a), "Agencies shall make sure the proposal which is the subject of an EIS is properly defined."
- 10. CEQ NEPA Regulation 1502.16, "This section forms the scientific and analytic basis for the comparisons ... environmental impacts of the alternatives including the proposed action, any adverse environmental effects which cannot be avoided should the proposal be implemented, the relationship between short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and irreversible or irretrievable commitments of resources."
- 11. CEQ NEPA Regulation, 1502.21, "No material may be incorporated by reference unless it is reasonably available for inspection by potentially interested persons within the time allowed for comment."
- 12. CEQ NEPA Regulation, 1502.24, "Agencies shall insure the professional integrity, including scientific integrity, of the discussions and analyses in EISs. They shall identify any methodologies used and shall make explicit reference by

footnote to the scientific and other sources relied upon for conclusions in the statement."

- 13. CEQ NEPA Regulation, 1506.6(a), "Agencies shall make diligent efforts to involve the public in preparing and implementing their NEPA procedures."
- 14. CEQ NEPA Regulation, 1508.3, "Affecting means will or may have an effect on."
- 15. CEQ NEPA Regulation, 1508.14, "Human Environment shall be interpreted comprehensively to include the natural and physical environment and the relationship of people with that environment ... When an EIS is prepared and economic or social and natural or physical environmental effects are interrelated then the EIS will discuss all of these effects on the human environment."
- 16. CEQ NEPA Regulation, 1508.18, "Major Federal action includes actions with effects that may be major and which are potentially subject to Federal control and responsibility. Major reinforces but does not have a meaning independent of significantly ... Actions include new and continuing activities, including projects ... approval of specific projects, such as construction or management activities located in a defined geographic area."
- 17. CEQ NEPA Regulation, 1508.27, "Significantly as used in NEPA requires considerations of both context and intensity ... Context means that the significance of an action must be analyzed in several contexts ... For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as whole ... Intensity refers to the severity of impact ... impacts may be both beneficial and adverse. A significant effect may exist even if the Federal agency believe that on balance the effect will be beneficial ... Unique characteristics of the geographic area ... The degree to which the effects on the quality of the human environment are likely to be highly controversial ... The degree to which the possible effects ... are highly uncertain or involve unique or unknown risks ... Whether the action is related to other actions with individually insignificant but cumulatively significant impacts ... Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment."
- 37) For a DEIS, dictionary usage of words or phrases will not suffice to provide the public with a clear picture of what the intensity, significance, and context of environmental impacts are for the proposed water conveyance structure, associated structures, and any secondary development that this proposal will promote by providing water in the Houston area. In other words, an all qualitative assessment, analysis, and evaluation of environmental impacts is not sufficient to deal with the clearly articulated CEQ requirements in **Section 1502.14**, that the EIS "should present the environmental impacts of the proposal and the alternatives in comparative form, thus **sharply defining the issues and**

providing a clear basis for choice among options by the decision-maker and the public".

- 1. Quantitative assessment, analysis, and evaluation are necessary to ensure that alternatives and environmental impacts are clearly defined and shown in the EIS. As stated in the CEQ NEPA implementing regulations, **Section 1500.1(b)**, Purpose, "NEPA procedures must insure that environmental information is available to public officials and citizens ... The information must be of high quality. Accurate scientific analysis ... are essential to implementing NEPA".
- 2. As stated in **Section 1501.2(b)**, "Identify environmental effects and values in adequate detail so they can be compared to economic and technical analyses."
- 3. As stated in **Section 1502.8**, "which will be based upon the analysis and supporting data from the natural and social sciences and the environmental design arts."
- 4. As stated in **Section 1502.18(b)**, about the Appendix, "Normally consist of material which substantiates any analysis fundamental to the impact statement".
- 5. As stated in **Section 1502.24**, "Agencies shall insure the professional integrity, of the discussions and analyses ... They shall identify any methodologies used and shall make explicit reference by footnote to the scientific and other sources relied upon for conclusions in the statement."

The analysis that the Corps must conduct for this EIS is much more than "best professional judgment". "Best professional judgment" is where a group of people, using their experience, decide what is important. This level of assessment, analyses, and evaluation for environmental impacts and alternatives is an insufficient foundation upon which to base an EIS.

38) The Corps must define what phrases and words mean so that the public can review, comment on, and understand what the Corps refers to regarding this water conveyance structure, associated structures, and any secondary development that this proposal will promote by providing water in the Houston area. Decision-makers also need to know this information. The qualitative description of phrases used to describe environmental impacts or the protectiveness of an alternative does not provide the public with the degree of comparison required by the CEQ's mandatory NEPA implementing regulations. These regulations state, in **Section 1502.14**, **Alternatives including the proposed action**, that, "This section is the heart of the EIS ... it should present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decision-maker and the public ... Devote substantial treatment to each alternative in detail ... so that reviewers may evaluate their comparative merits."

The CEQ also states, in Section 1502.16 and (d), Environmental consequences, that, "This section forms the scientific and analytic basis for the comparisons ... The environmental effects of alternatives including the proposed action the comparisons under Section 1502.14 will be based on this discussion."

It is key that the Corps clearly compare and make apparent the distinctiveness of each alternative and its impacts or protectiveness. This is not accomplished when phrases are used qualitatively instead of quantitatively with more detailed and clear descriptions of qualitative information. The Sierra Club requests that the Corps clarify and detail clearly the comparative differences between each alternative and define clearly what the words or phrases used mean.

The Sierra Club appreciates this opportunity to comment. Thank you.

Sincerely,

Brandt Mannchen Brandt Mannchen

Chair, Forestry Subcommittee

Houston Regional Group of the Sierra Club

5431 Carew

Houston, Texas 77096

713-664-5962

brandtshnfbt@juno.com

From: Krenz, Kelly
To: Carroll, Mary Ann

Subject: FW: zebra Mussel (UNCLASSIFIED)

Date: Tuesday, August 09, 2011 10:58:43 AM

Attachments: luce bayou NOI.pdf

#### Mary Ann,

Here is Brian VanZee's comment after the public notice was published in the Federal Register. Please combine it with the rest. thanks

### Kelly

Kelly Krenz, PG Direct 713.267.2849 Cell: 832-721-9802 AECOM 5757 Woodway, 101 West Houston, TX 77057 Tel 713.267.2849 Fax 713.267.3110

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Please consider the environment before printing this e-mail.

----Original Message-----From: Esenwein, Robert

Sent: Tuesday, June 21, 2011 12:39 PM

To: Brian VanZee Cc: Krenz, Kelly

Subject: RE: zebra Mussel (UNCLASSIFIED)

Brian, I will include your comments as part of the EIS scoping effort. Even so, comments are not due until 29 July 2011. Please send additional comments as necessary. Regards, Bob Esenwein

Robert Esenwein CEP, Associate Vice President/Senior Environmental Planner AECOM 1555 Poydras St. Ste 1860 504.529.4533 (AECOM New Orleans ) 504.862.1292 (USACE New Orleans District) 504.913.4671 (cellular) 713.267.2702 (AECOM Houston office)

----Original Message-----

From: Brian VanZee [mailto:Brian.VanZee@tpwd.state.tx.us]

Sent: Tuesday, June 21, 2011 11:59 AM To: Laney, Everett SWT; Esenwein, Robert

Cc: Mobley, Brandon W SWF; Dunn, Tonya N SWT; Howard Elder; Mark Webb; Earl Chilton

Subject: RE: zebra Mussel (UNCLASSIFIED)

Mr. Esenwein,

To date we still only have two confirmed established populations of Zebra Mussels in Texas; they are in Lake Texoma and Sister Grove Creek.

Sister Grove Creek has a small population and it flows into Lake Lavon and forms the upper Trinity River Basin. We have also had confirmed introductions of zebra mussels into Lakes Lavon and Ray Hubbard, both of which are on the Trinity River basin. Both of these introductions were via contaminated boats that had been moved from Lake Texoma. A single living zebra mussel was found on the boat ramp at Lake Ray Hubbard, which presumably fell off the boat that was launched, but to date we have no indication that zebra mussels have become established in either Lake Ray Hubbard or Lavon. Our eradication efforts on Sister Grove Creek last fall were not 100% effective; we documented some mortality following our treatments but we also found living zebra mussels still present in Sister Grove Creek.

In addition to zebra mussels the potential spread of invasive aquatic vegetation (eg. water hyacinth, giant salvinia and water lettuce) via this water transfer needs to be considered as well. We know all 3 of these species and others are found in the Trinity River basin. If you need more info in regards to invasive aquatic vegetation I would recommend contacting either Howard Elder (409-384-9965), Mark Webb

(979-272-1430) or Earl Chilton (512-389-4652) whom I have included in this email.

Since zebra mussels are present in the Trinity River Basin and because invasive aquatic vegetation is also found in the vicinity of this water transfer I think these concerns need to be fully addressed in the EIS.

Thanks.

\_\_\_\_\_

Brian Van Zee TPWD-Inland Fisheries Regional Director

1601 E. Crest Dr. Waco, TX, 76705 Voice: 254-867-7974

Fax: 254-867-6839

----Original Message-----

From: Laney, Everett SWT [mailto:Everett.Laney@SWT03.usace.army.mil]

Sent: Monday, June 20, 2011 4:53 PM

To: Esenwein, Robert

Cc: Brian VanZee; Mobley, Brandon W SWF; Dunn, Tonya N SWT

Subject: RE: zebra Mussel (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

Mr. Esenwein ~ It's going to be next week before I get any opportunity to put any updates together for you. In the meantime you should be able to get most of the latest news on the www.protectyourwaters.net website. A closer contact to the issue is Brian VanZee with the TPWD or Brandon Mobley with SWF. He can give you the latest and greatest happenings. I'll try to look at the EIS next week and get back with you.

Everett Laney, Biologist U.S. Army Corps of Engineers Tulsa District, PE-E 1645 S. 101 E. Ave. Tulsa, OK 74128-7546 918-669-7411

"Ridin' the Gravy Train with Biscuit Wheels"

-----Original Message-----

From: Esenwein, Robert [mailto:Robert.Esenwein@aecom.com]

Sent: Monday, June 20, 2011 3:38 PM

To: Laney, Everett SWT Subject: zebra Mussel

Mr. Laney, I am a third party contractor working on an EIS for the SWG Regulatory Branch (Jayson .M Hudson, PM). The project is an inter basin transfer of water from the Trinity River near Romayer, Tx to Lake Houston which is in the San Jacinto River water shed. The EIS NOI can be found at <a href="http://www.swg.usace.army.mil/reg/eis.asp">http://www.swg.usace.army.mil/reg/eis.asp</a>

I am interested in any additional information about the Zebra Mussel you can share beyond the 30 August 2010 power point presentation you presented at the International Conference on Aquatic Invasive Species.

Information concerning eradication, management etc. as well as infestation in the Trinity River basin would be appreciated. Regards, Robert Esenwein

Robert Esenwein CEP, Associate Vice President/Senior Environmental Planner

**AECOM** 

1555 Poydras St. Ste 1860

504.529.4533 (AECOM New Orleans )

504.862.1292 (USACE New Orleans District)

504.913.4671 (cellular)

713.267.2702 ( AECOM Houston office)

Classification: UNCLASSIFIED

Caveats: NONE



### **United States Department of the Interior**

### U.S. FISH AND WILDLIFE SERVICE

Ecological Services P.O. Box 1306, Room 6034 Albuquerque, New Mexico 87103



In Reply Refer To: FWS/R2/ES-HC/048943

JUL 2 1 2011

Mr. Jayson M. Hudson U.S. Army Corps of Engineers, Regulatory Branch P.O. Box 1229 Galveston, Texas 77553-1229

Dear Mr. Hudson:

The U.S. Fish and Wildlife Service (Service) has reviewed the U.S. Army Corps of Engineers (Corps) May 25, 2011, notice of intent to prepare an environmental impact statement (76 FR 30320) on the proposed Luce Bayou Interbasin Transfer Project. The comments provided below are intended to assist in providing technical assistance on the proposed construction of a conveyance system to transfer water from Trinity River to Lake Houston. Please refer to our May 19, 2010, letter concerning lighting, utility corridors, long-term management of sediment basins, restrictions to wildlife movement, and invasive species control (enclosed).

Since our May 19, 2010, letter, we have learned a small population of the invasive zebra mussel has been confirmed in the upper Trinity River basin in Grayson County, Texas. A single live adult zebra mussel has been found in Lake Ray Hubbard, also in the Trinity River basin. Zebra mussels attach in large numbers to the shells of live native mussel, and are implicated in the loss of entire native mussel beds. This invasive species impedes locomotion (both laterally and vertically), interferes with normal valve movements, deforms valve margins, and suffocates and starves native mussels by depleting water of oxygen and food. Heavy infestations of zebra mussels on native mussels may overly stress the animals by reducing their energy stores. Zebra mussels may also filter the sperm and possibly glochidia of native mussels from the water column, thus reducing reproductive potential. The zebra mussel has eliminated native mussel fauna in some smaller streams. Zebra mussels also attach to inanimate objects and can clog water intake pipelines.

We believe the proposed Luce Bayou Interbasin Transfer Project would provide a conduit for the introduction of zebra mussels from the Trinity River system into the San Jacinto River basin. Currently, there are no economically feasible methods to prevent zebra mussels from spreading throughout a river system once the species is introduced. However, the Service will work with the Corps during the development of the Environmental Impact Statement on methods to prevent the spread of zebra mussels into the San Jacinto River basin.

The Service appreciates the ongoing coordination and cooperation of the Corps and the Coastal Water Authority during the development of this project. We appreciate the opportunity to provide comments on the proposed Luce Bayou Interbasin Transfer Project, and we look forward to continuing our work with your agency. If you have any further questions, please contact Edith Erfling, Field Supervisor, Ecological Services Field Office, Clear Lake, Texas, at 281-286-8282 extension 228.

Sincerely,

Regional Director

Enclosure

cc: Director (AFHC-HRC), Attention: Stephanie Nash Supervisor, Ecological Services Field Office, Clear Lake, TX Regional Environmental Officer, Office of Environmental Policy and Compliance, Albuquerque, NM



Houston Regional Group P. O. Box 3021 Houston, Texas 77253-3021 713-895-9309 http://texas.sierraclub.org/houston/

Mr. Jayson M. Hudson Regulatory Branch, CESWG-PE-RB Galveston District U.S. Army Corps of Engineers P.O. Box 1229 Galveston, Texas 77553-1229

Texas Commission on Environmental Quality (TCEQ) 401 Coordinator MSC-150 P.O. Box 13087 Austin, Texas 78711-3087

Dear Jayson and TCEQ,

Enclosed are additional scoping comments of the Houston Regional Group of the Sierra Club (Sierra Club) for the U.S. Army Corps of Engineers (Corps), Galveston District, Section 10/404 Permit Application No. SWG-2009-00188, scoping public hearing that the Sierra Club attended on July 21, 2011 for the proposed construction by the Coastal Water Authority (CWA) of a 26.5 mile water conveyance structure and the requirement by the National Environmental Policy Act (NEPA) for an environmental impact statement (EIS). These comments supplement the comments we submitted April 30, 2010 and June 8, 2011.

The Sierra Club provides these issues and concerns for the proposed project:

1) How will the proposal affect the change in freshwater inflows into Galveston Bay?

Currently, most inflow into Galveston Bay comes from the Trinity River. With the proposal about 400-500 million gallons/day (MGD) of inflow will be diverted from the Trinity River to the San Jacinto River. This change in flow regime could affect the sedimentation of the Trinity River Delta; the salinity of Trinity Bay; the flooding/drying of bottomland hardwood forests (Trinity River National Wildlife Refuge and other similar forests) and cypress swamps (Lake Charlotte, Mud Lake, Miller Lake, Mac Lake, Lake Pass) along the Trinity River and the Wallisville Area (Old River, Lost River, Lost Lake, Mayes Lake, Round Lake, Old River Lake, Mesquite Pond, Dunn Lake, Lawrence Lake, Red Bayou, Jacks Pass, Blind Bayou, Smith Bayou, Southwest Pass, Dunn Bayou, Lone Island Bayou, Big Hog Bayou); aquatic plants like Wild Celery; oyster growth and production (reduced organic matter, nutrients, and sediments); and oyster

disease, parasites, and predators in Trinity Bay. What mitigation will be required for any environmental impacts?

For the San Jacinto River, how would the riparian and floodplain area be affected (Rickett Lake, Faucet Lake, Muleshoe Lake, McCracken Lake, George White Lake, West Camp Lake, Bird lake, Whites Lake, Lake Sandy, and Grennel Slough); sedimentation of the Houston Ship Channel; and erosion of habitats and back bays (Scott Bay, Tabbs Bay, and Burnet Bay and bird islands) where the San Jacinto River flows into Galveston Bay. What mitigation will be required for any environmental impacts?

2) How will the transfer of exotic species, both terrestrial and aquatic, be affected by the proposal in Lake Houston, other lakes and ponds, Galveston Bay, other bays, Trinity River, San Jacinto River, and any other streams and tributaries of the water bodies mentioned? What mitigation will be required for any environmental impacts?

Some species of concern include Zebra mussels, hydrilla, water hyacinth, giant Salvinia, Chinese Tallow, exotic privet species, and many others. One mitigation measure that could be used is to reduce exotic Chinese Tallow trees in the Wallisville Area and in Trinity River National Wildlife Refuge properties.

3) What specific impacts will occur on Lower Luce Bayou, the mouth of Luce Bayou, and the shoreline of Lake Houston? What mitigation will be required for any environmental impacts?

Will stream mitigation be required? The Sierra Club supports, as a mitigation measure, the implementation of the 2008 wetlands mitigation regulations for the mitigation of streams that are in any way damaged or degraded by the proposal.

- 4) How will fisheries in Lake Houston, Luce Bayou, Trinity River, and San Jacinto River, and any of the other water bodies in this comment letter be affected? What mitigation will be required for any environmental impacts?
- 5) Since the Trinity River and San Jacinto River do not have identical floras, faunas, and living communities how will the native aquatic and terrestrial systems in Lake Houston, other lakes and ponds, Galveston Bay, other bays, Trinity River, San Jacinto River, and any other streams and tributaries of the water bodies mentioned be affected by the transfer of disease vectors, parasites, phytoplankton, zooplankton, invertebrates, fish, terrestrial and aquatic plants, and any other native plants and animals between the Trinity River and San Jacinto River Watersheds? Will community homogenization occur? What mitigation will be required for any environmental impacts?
- 6) What leakage and evaporation will occur due to the use of an open canal? What mitigation will be required for leakage and evaporation? An all or mostly all

pipeline alternative(s) should be analyzed as a reasonable alternative(s) for the proposed action.

- 7) Will temporal patterns of stream fishes that have evolved in seasonal low-flow or high-flow periods change? What mitigation will be required for any environmental impacts?
- 8) Will there be shifts in benthic invertebrate communities? What mitigation will be required for any environmental impacts?
- 9) Will there be changes in water quality like turbidity, salinity, alkalinity, conductivity, dissolved oxygen, etc., in any water bodies that are affected by the proposal? What mitigation will be required for any environmental impacts?
- 10) Will more saltwater intrusion occur in the Trinity River? Will the slatwater intrusion be more severe? What will occur to the Wallisville Area if the Wallisville Dam must be used more frequently to prevent more frequent instances of saltwater intrusion? What mitigation will be required for any environmental impacts?
- 11) There is a need to conduct pre-operational baseline studies, transfer operation studies, and post operational studies. The Sierra Club recommends that there be at least 3 years of pre-operational baseline studies; 1 year of transfer operation studies; and three years of post-operational studies to determine the impacts that the proposal may have on the Trinity River, San Jacinto River, Lake Houston, Galveston Bay, and the other water bodies mentioned in this comment letter.
- 12) The sampling protocol for the proposal should be (1) designed to account for long-term variability within river basins; (2) examine changes in spatial-temporal variability among multiple trophic levels; and (3) make biologically sound comparisons between river basins.
- 13) What is the magnitude of impacts that entrainment will have due to the proposal? What mitigation will be required for any environmental impacts?
- 14) How will sedimentation and erosion be affected by the proposal? What are the hydrological implications for land use due to the proposal? What mitigation will be required for any environmental impacts?
- 15) How will fish-habitat relationships be affected by the proposal? What mitigation will be required for any environmental impacts?
- 16) Three cumulative impact actions and their environmental impacts that should be analyzed in the DEIS are the proposed Grand Parkway, Segment H, Segment I-1, and the proposed Bayport-Cleveland Corridor.

- 17) How will climate change affect all of the above issues and concerns? What mitigation will be required for any environmental impacts?
- 18) Enclosed is an article entitled "Inter-basin Water Transfer: Ecological Concerns," by Michael R. Meador. This article may assist the Corps when preparing the DEIS and conducting the appropriate analysis, evaluation, and assessment for the proposal.

The Sierra Club appreciates this opportunity to comment. Thank you.

Brandt Maruchan

Sincerely,

Brandt Mannchen

Chair, Forestry Subcommittee

Houston Regional Group of the Sierra Club

5431 Carew

Houston, Texas 77096

713-664-5962

brandtshnfbt@juno.com

### **Feature**

# Inter-basin Water Transfer: reduced inflowed sections Ecological Concerns

Michael R. Meador

### **ABSTRACT**

The concept of transferring water from one river basin to another has evolved over centuries as a useful means of meeting water demands. However, such projects have the potential for serious ecological impacts, including introduction of nonindigenous organisms, changes in water quality and hydrologic regimes, and alteration of habitat. Although limited progress has been made in the last 20 years regarding our understanding of site-specific ecological consequences of inter-basin water transfer, research to date is inadequate for assessment of water transfer impacts. It is imperative that we develop coordinated research methodologies to be incorporated into the planning and evaluation of inter-basin water transfer projects.

Domestic and municipal needs for water have always held priority over any other use. Consequently, environmental, recreational, industrial, and even hydropower needs have been ancillary to exploitation of water resources for human consumption. As the human population continues to grow, demand for water has increased dramatically, often exceeding regional supply.

One solution for growing water demands has been to transfer water from areas of surplus to areas of deficit, and most water development projects involve movement of water from one area to another. In Canada, two major criteria have been used to define water transfers: (1) diverted flow does not return to the stream of origin or parent stream within 20 km of the point of withdrawal, and (2) mean annual flow transferred is not less than 0.5 m³/s (Quinn 1981).

Although the potential for adverse ecological impacts exists with any transfer of water, the most serious ecological impacts are likely to result from movement of water from one drainage basin to another, defined as inter-basin transfers. The objectives of this paper are to: (1) briefly review the history of inter-basin water transfer projects, (2) examine potential ecological impacts, and (3) propose the development of research guidelines for future inter-basin transfer projects.

### Historical Background

Archaeological evidence indicates that inter-basin water transfer was developed as early as Babylonian times. Saggs (1962) reported that a water resource development project constructed in 2500 B.C. connected the Tigris and Euphrates rivers. In the Western Hemisphere, ruins in Peru suggest the existence of a canal that carried water from the Andes Mountains 200 km to the capital (Clyde 1953). From 300

B.C. to 1450 A.D., American Indians in central Arizona constructed over 2,000 km of canals in what is now the metropolitan Phoenix area (Masse 1981; Marsh and Minckley 1982). These canals as well as acequias designed by Spaniards in the southwestern United States during the 1600s and 1700s cannot be considered inter-basin transfers, but may have served an important role in the development of large-scale transfer projects that followed in the Southwest (Warnick 1969).

California was the first state in the United States to develop an inter-basin transfer of water to meet regional demands. California has a keen interest in inter-basin transfer because most of the state's potentially usable water has its source in the northern third of the state, whereas most of the water demand is located in the semiarid southern two-thirds. Proposals to carry water from the Sacramento Valley to the San Joaquin Valley began as early as 1873 (Howe and Easter 1971). In 1913, the Los Angeles Aqueduct (the first California project to be constructed) carried water from the Owens Valley on the eastern slopes of the Sierra Nevada to the city of Los Angeles. In 1928, a 389-km aqueduct was constructed to transfer water from the Colorado River to the metropolitan Los Angeles area (Reisner 1986).

One of the most complex and expensive inter-basin transfer projects was created by the construction of the California Water Project in 1972. Designed to carry water from northern California's Feather River to southern California, this project included 21 dams and reservoirs, 22 pumping plants, and 1,100 km of canals, tunnels, and pipelines. Owen (1975) reported that Apollo astronauts could identify only two major structures when looking down on earth—one was the Great Wall of China and the other was the main aqueduct of the California Water Project. Today, an increasing population combined with several years of drought have resulted in dangerously low water-storage levels in many parts of southern California, most notably Santa Barbara. As the population and economy of southern California continue to grow, demand for water

Michael R. Meador is a fisheries ecologist at the U.S. Geological Survey, Water Resources Division, 3916 Sunset Ridge Road, Raleigh, NC 27607.

Table 1. Suggested list of some critical research and assessment expertise and topics necessary to adequately evaluate potential impacts as a result of inter-basin transfer.

Researchers	Topics
Hydrologist	Water quantity (e.g., level, discharge, velocity) as well as erosion, sedimentation, and general hydrological implications for land use.
Biological Limnologist/Chemical Limnologist	Water quality (e.g., nutrients, turbidity, salinity, alkalinity) as well as biological aspects such as periphyton, phytoplankton, and zooplankton.
Invertebrate Ecologist	Spatial-temporal variability of macroinvertebrates, introduction of invertebrates, invertebrate-habitat relationships.
Botanist	Aquatic and terrestrial riparian vegetation, introductions.
Fisheries Biologist	Spatial and temporal variability of fish, effects of fish species introductions on native fauna, ichthyoplankton entrainment, fish-habitat relationships, fish diseases.
Systems Analyst/Modeler	Environmental responses under varying scenarios to evaluate effects of various discharge rates on flora, fauna, and hydrology.

within river basins, (2) examine changes in spatial-temporal variability among multiple trophic levels, and (3) make biologically-sound comparisons between river basins. These research methodologies must assess not only community structure and function, but also factors that may influence spatial and temporal variability (e.g., introduced organisms, changes in flow, alteration of habitat, changes in water

To accurately evaluate potential ecological impacts directly resulting from water transfer, a distinction must first be drawn between direct impacts of inter-basin transfer and ecological changes as a result of water use following the transfer. Second, direct impacts of water transfer should be separated into those occurring in the surplus (exporting) basin, those occurring in the deficit (recipient) basin, and those resulting from the conveyance mechanism (Figure 1).

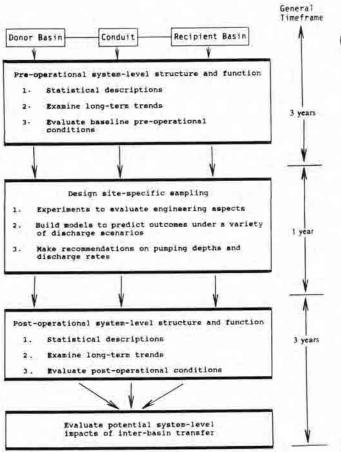
The critical role of long-term research in ecology is growing in acceptance (Likens 1989; Magnuson 1990). The occurrence of infrequent phenomena, particularly floods, can seriously bring into question the reliability of conclusions based on short-term data collected on river systems. For this reason, I propose a minimum of 3 years of intensive pre-operational baseline studies. This is to be followed by a 1-year period to evaluate transfer operations, thus allowing the opportunity to conduct small-scale, site-specific experiments to provide information on engineering aspects of the transfer design (e.g., effects of varying discharge rates on physicochemical patterns). To allow for the possibility of time lags in cause-effect mechanisms, a minimum of a 3-year period should be required for post-operation studies.

Ideally, such an approach to assessment would be incorporated into the planning phase of inter-basin transfer projects. However, assessment of all potential short- and long-term impacts is a difficult and expensive task. Also, much work is needed to evaluate sampling gear and protocols to statistically compare changes in biotic processes in rivers. Progress in this area is being made through innovative approaches, such as the U.S. Geological Survey's

1988). However, we have a long way to go.

National Water Quality Assessment Program (Hirsch et al. Interrelations among tasks and objectives for inter-basin transfer studies.

Fisheries scientists should be concerned about potential ecological impacts of inter-basin water transfers. As researchers, fisheries scientists have participated in effectively identifying research needs to anticipate environmental impacts (e.g., Kapuscinski and Hallerman 1990; Tyus 1990). The ideas that I propose are not meant to serve as detailed



guidelines, but are meant to stimulate thought and debate concerning ecological assessments of water transfer projects. To protect and enhance our river basins, we must proceed with coordinated research methodologies, multidisciplinary planning, and innovative programs if we are to ensure future multiple use of river basins that is ecologically sound.

### Conclusions

Thomas and Box (1969, p. 374) stated "We do not argue that this large-scale movement of water is not inevitable or unnecessary, but we do believe that, before further action is taken more careful investigations should be made of the ecological and social implications of water transport. . . . We urge sound ecological studies be incorporated in the initial planning for large-scale water movement." Almost 20 years later, Petitjean and Davies (1988, p. 819) underscored the severe lack of knowledge related to the ecological impacts of inter-basin transfer projects: "It is imperative that formal ecological impact assessments and research infrastructure be drawn up nationally, as a matter of priority, in order that the deleterious impacts of future transfer schemes be minimized." These authors also strongly urged that a workshop be conducted to expand and develop methodologies to evaluate potential ecological impacts of inter-basin water transfers. Given the tremendous complexities of such projects, the potential for serious ecological impact, and the pressing demand for water, a meeting of interested parties cannot take place too soon.

### Acknowledgments

W. E. Kelso and W. J. Matthews provided useful discussions and constructive criticism. The North Texas Municipal Water District provided the opportunity for research into inter-basin transfer and financial support while writing this paper.

### References

Armitage, P. D. 1979. Stream regulation in Great Britain. Pages 165–181 in J. V. Ward and J. A. Stanford, eds. The ecology of regulated streams. Plenum Press, New York.

Bergman, A., and R. H. Matthews. 1983. Compensation under interbasin transfers of water—its effect upon regional and state water resources planning. Pages 153–158 in R. J. Charbeneau and B. P. Popkin, eds. Regional and state water resources planning and management. Proceedings of a symposium of the American Water Resources Association, Bethesda, MD.

Clyde, G. D. 1953. Irrigation in the United States. Transactions of the American Society of Civil Engineers Vol. CT (Centennial Transactions), Paper 2594.

Coutant, C. C. 1985. Striped bass, temperature, and dissolved oxygen: a speculative hypothesis for environmental risk. Trans. Am. Fish. Soc. 114:31–61.

Cox, W. E., and L. A. Shabman. 1982. Institutional issues affecting water supply development: illustrations from southeastern Virginia. Virginia Water Resources Research Center, Completion Report, Blacksburg.

Fattarusso, L. R. 1982. An economic evaluation of interbasin water transfers: a case study of southwestern Connecticut. Master's thesis. Connecticut University, Storrs.

Golubev, G. N., and A. K. Biswas. 1985. Large-scale water transfers: emerging environmental and social issues. Pages 1–5 in G. N. Golubev and A. K. Biswas, eds. Large-scale water transfers: emerging environmental and social experiences. United Nations Environmental Programmes, Water Resources Series, Vol. 7. Tycooly Publishing, Oxford, UK.

# **EMG**

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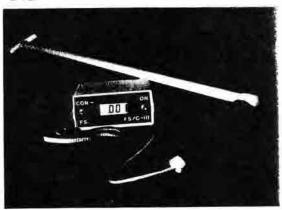
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- Gore, J. A., and G. E. Petts. 1990. Alternatives in regulated river management. CRC Press, Boca Raton, FL.
- Guiver, K. 1976. Implications of large-scale water transfers in the UK, the Ely Ouse to Essex transfer scheme. Chem. Ind. (Lond.) 4:132–135.
- Gurvich, L. S., Y. V. Novikov, and M. M. Saifutdinov. 1975. Study of sanitary problems in connection with interbasin transfer of river runoff. Gig. Sanit. 12:62–65.
- Hesse, L. W., G. L. Hergenrader, H. S. Lewis, S. D. Reetz, and A. B. Schlesinger. 1982. The Middle Missouri River. The Missouri River Study Group, Norfolk, NE.
- Howe, C. W., and K. W. Easter. 1971. Interbasin transfers of water—economic issues and impacts. Johns Hopkins University Press, Baltimore, MD.
- Hirsch, R. M., W. M. Alley, and W. G. Wilber. 1988. Concepts for a national water-quality assessment program. U.S. Geological Survey Circular 1021, Reston, VA.
- Kapuscinski, A. R., and E. M. Hallerman. 1990. Transgenic fish and public policy: anticipating environmental impacts of transgenic fish. Fisheries (Bethesda) 15(1):2-11.
- Lacewell, R. D., and J. G. Lee. 1988. Land and water management issues: Texas High Plains. Pages 127–167 in M. T. El-Ashry and D. C. Gibbons, eds. Water and arid lands of the western United States, Cambridge University Press, New York.
- Laurenson, L. J. B., and C. H. Hocutt. 1986. Colonisation theory and invasive biota: the Great Fish River, a case history. Environ. Monitor. Assess. 6:71–90.
- Laurenson, L. J. B., C. H. Hocutt, and T. Hecht. 1989. An evaluation of the success of invasive species of the Great Fish River. J. Appl. Ichthyol. 1(1989):28–34.
- LeCren, E. D. 1972 A commentary on uses of a river: past and present. Pages 251–260 in R. T. Oglesby, C. A. Carlson, and J. A. McCann, eds. River ecology and man. American Press, New York.
- Likens, G. E. 1989. Long-term studies in ecology: approaches and

- alternatives. Springer-Verlag, New York.
- Magnuson, J. J. 1990. Long-term ecological research and the invisible present. BioScience 40:495–501
- Marsh, P. C., and W. L. Minckley. 1982. Fishes of the Phoenix metropolitan area in central Arizona. N. Am. J. Fish. Manage. 4:395–402.
- Massarelli, R. J., and J. W. Hannah. 1983. Caught in the middle—interbasin transfer of water from a local government perspective Pages 147–152 in R. J. Charbeneau and B. P. Popkin, eds. Regional and state water resources planning and management. Proceedings of a symposium of the American Water Resources Association, Bethesda, MD.
- Masse, W. B. 1981. Prehistoric irrigation systems in the Salt River valley, Arizona. Science 214:408–415.
- McGauhey, P. H. 1969. Physical implications of large-scale water transfers. Pages 358–374 in J. M. Bagley and T. L. Smiley, eds. Arid lands in perspective. University of Arizona Press, Tucson.
- Meador, M. R., A. G. Eversole, and J. S. Bulak. 1984. Utilization of portions of the Santee River system by spawning blueback herring. N. Am. J. Fish. Manage. 4:155–163.
- Meador, M. R., and W. M. Matthews. 1992. Spatial and temporal patterns in fish assemblage. Structure of an intermittent Texas stream. Am. Midl. Nat. 127:106–114.
- Mooney, H. A., and J. A. Drake. 1986. Ecology of biological invasions of North America and Hawaii. Springer-Verlag, New York.
- Moyle, P. B., H. W. Li, and B. Barton. 1987. The Frankenstein effect: impact of introduced fishes on native fishes of North America. Pages 415–426 m R. H. Stroud, ed. The role of fish culture in fisheries management. American Fisheries Society, Bethesda, MD.
- O'Keefe, J. H., and F. C. De Moore. 1988. Changes in the physicochemistry and benthic invertebrates of the Great Fish River, South Africa, following an interbasin transfer of water. Regulated Rivers Research and Management 2:39-55.
- Owen, O. S. 1975. Natural resource conservation: an ecological approach. MacMillan Co., New York.
- Petitjean, M. O. G., and B. R. Davies. 1988. Ecological impacts of inter-basin water transfers: some case studies, research requirements, and assessment procedures in Southern Africa. 5. Afr. J. Sci. 84:819–828.
- Quinn, F. J. 1981. Water transfers—Canadian style. Canadian Water Research Journal 61:64–76.
- Reisner, M. 1986. Cadillac desert: the American West and its disappearing water. Viking, New York.
- Romanenko, V. D., O. P. Okslyuk, and V. N. Zhukinskii. 1983. Hydrobiological aspects of ecological substantiation of interbasin water transfers. Water Resources 10:196–204.
- Saggs, H. W. F. 1962. The greatness that was Babylon. Hawthorn Books, Inc., New York.
- Shafland, P. L., and W. M. Lewis. 1984. Terminology associated with introduced organisms. Fisheries (Bethesda) 9(4):17–18.
- Stanford, J. A., and J. V. Ward. 1979. Stream regulation in North America. Pages 215–236 in J. V. Ward and J. A. Stanford, eds. The ecology of regulated streams. Plenum Press, New York.
- Thomas, G. W., and T. W. Box. 1969. Social and ecological implications of water importation into arid lands. Pages 363–374 in J. M. Bagley and T. L. Smiley, eds. Arid lands in perspective. University of Arizona Press, Tucson.
- Tyus, H. M. 1990. Effects of altered stream flows on fishery resources. Fisheries (Bethesda) 15(3):18–21.
- Warnick, C. C. 1969. Historical background and philosophical basis of regional water transfer. Pages 340–352 in J. M. Bagley and T. L. Smiley, eds. Arid lands in perspective. University of Arizona Press, Tucson.
- Weinberg, E. 1969. Intrastate, interstate, and international legal and administrative problems of large-scale water transfer. Pages 352–357 m J. M. Bagley and T. L. Smiley, eds. Arid lands in perspective. University of Arizona Press, Tucson.

# **Environmental Impact Statement - Luce Bayou Interbasin Transfer Project: Comment Sheet**



Thank you for your interest in the Luce Bayou Interbasin Transfer Project EIS, Harris and Liberty Counties, Texas. Please complete the appropriate sections of this form to provide scoping comments. Written comments can be submitted at the Scoping Meeting, faxed to (409) 766-3931, e-mailed to Jayson.m.hudson@usace.army.mil, or mailed to

Mr. Jayson Hudson, USACE-Regulatory Branch, P.O. Box 1229, Galveston, Texas 77553.

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For more information about the project or to comment or Comments on the scope and alternatives should be received the Draft EIS.	nline, visit http://www.swg.usace.army.mil/reg/eis.asp. wed by July 29, 2011, to be considered in defining the scope
I want to stay informed about the progress of the	he project. Please include my name on the mailing list.
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Please write comments, questions, or concerns below. C	ontinue on the back or a separate sheet if necessary.
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San Garento riven. We are very concerne	a about how their will impact
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### Hudson, Jayson M SWG

From: Charrish Stevens@fws.gov

Sent: Wednesday, July 27, 2011 7:57 AM

To: Hudson, Jayson M SWG

Cc: David\_Hoth@fws.gov; Edith\_Erfling@fws.gov Subject: Scoping comments for SWG-2009-00188

Importance: High

Hello Jayson,

Here are my scoping comments for SWG-2009-00188. Let me know if this will do from us. I have run these comments by David Hoth, and he was ok with it being sent informally as such.

The Service still stands by its previous comments that were made in our letter dated May 19, 2010 to your office. However, we do have additional concerns on how this project is going to affect the native species of freshwater mussels that occur in the San Jacinto River basin. The distribution of freshwater mussels depends heavily on their fish hosts. If fish that have been inoculated by a gravid female from the Trinity River basin move through the Luce Bayou Transfer project and make it to the San Jacinto River basin, then a species that may or may not be native to the San Jacinto River basin could be introduced. The Service is also concerned about the reverse scenario where inoculated fish from the San Jacinto basin move to the Trinity River basin. There is a potential that introduced mussel species can out compete native mussel species within a river basin.

Another concern the Service has is the introduction of the invasive Zebra mussel (Dreissena polymorpha). Zebra mussels were discovered in Texas waters on April 2009. Since the initial discovery of zebra mussels in Texas, additional live specimens have been reported in Lake Texoma on the Red River, where they are now believed to be well established. Later that year, a small confirmed population was found in West Prong Sister Grove Creek in the upper Trinity River basin in Grayson County, which is approximately 300 yards downstream of the Lake Texoma Water transfer pipe. West Prong Sister Creek flows into Lake Lavon and is in the headwaters of the vast Trinity River basin. Further downstream of this lake, a single live adult zebra mussel was found in Lake Ray Hubbard, which is also in the headwaters of the Trinity River basin. Because Texas has many interbasin water transfer pipelines, the spread of Zebra mussels statewide is in the foreseeable future if they become well established within the Trinity River basin.

Strayer (1999) reviewed in detail the mechanisms by which zebra mussels affect native mussel species. Zebra mussels attach in large numbers to the shells of live native mussels and are implicated in the loss of entire native mussel beds. This fouling impedes locomotion (both laterally and vertically), interferes with normal valve movements, deforms valve margins, and essentially suffocates and starves native mussels by depleting the surrounding water of oxygen and food. Heavy infestations of zebra mussels on native mussels may overly stress the animals by reducing their energy stores. Zebra mussels may also filter the sperm and possibly glochidia of native mussels from the water column, thus reducing reproductive potential (Vaughan 1997). Essentially, the Zebra mussel out competes all native mussels; therefore, they have virtually eliminated native mussel fauna in smaller streams elsewhere (Martel et al. 2001). Zebra mussels also affect inanimate objects such as, pipelines by attaching to the insides and clogging them up.

The Luce Bayou Interbasin water transfer project has the potential to further spread this invasive species from the Trinity River basin to the San Jacinto River basin, which is currently free of Zebra mussels. To date, there are no known economically feasible

alternatives to prevent the spread of Zebra mussels involving water transfer. The only known preventative measure is to not allow water transfer from river basins that are known to harbor zebra mussels.

If you should have any questions or concerns, please contact me, as I am the know project leader. You may contact me by e-mail or phone.

Sincerely,

Charrish L. Stevens U.S. Fish and Wildlife Biologist 17629 El Camino Real, Ste. 211 Houston, Texas 77058 281-286-8282



Life's better outside."

July 28, 2011

Mr. Jayson Hudson Regulatory Branch U.S. Army Corps of Engineers P.O. Box 1229

Galveston, Texas 77553-1229

401 Coordinator Mail Code 150 TCEQ P.O. Box 13087 Austin, Texas 73711-3087

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Carter P. Smith Executive Director Re: Permit Application Number SWG-2009-00188 Coastal Water Authority

Texas Parks and Wildlife Department (TPWD) is submitting comments and concerns which we request be considered and assessed in the Environmental Impact Statement (EIS) for the proposed Luce Bayou Interbasin Transfer project located in Liberty and Harris counties, Texas.

TPWD recommends the Environmental Impact Statement include detailed descriptions and evaluations for all associated phases of the project relative to the following:

- Assess the potential to transfer zebra mussels (*Dreissena polymorpha*) from
  the Trinity River into the San Jacinto River watershed via the proposed
  project; assess potential impacts to native freshwater mussels and fish if the
  zebra mussel is introduced into the San Jacinto River watershed; and evaluate
  potential control or containment mechanisms that can be implemented to
  prevent zebra mussel transfer.
- Assess the potential introduction of non-native, invasive aquatic organisms into the San Jacinto River watershed via the proposed project including, but not limited to, giant salvinia (Salvinia molesta); and evaluate mechanisms that can be implemented to prevent their transfer.
- Evaluate the potential to cause increased sedimentation near the discharge point in the upper end of Lake Houston. If that potential does exist, evaluate the impacts on fish, fish habitat and recreational fishing in upper Lake Houston from sedimentation.
- Potential impacts, including sedimentation, to native freshwater mussels and their habitats in the Trinity River, San Jacinto River, Luce Bayou, Lake Houston, and any tributary streams of those waterbodies.
- Potential magnitude of impacts to egg, larval, and adult stages of fish and other aquatic organisms due to impingement, entrainment, and movement of water associated with all project design components.
- Potential impacts to aquatic/estuarine organisms and aquatic/estuarine habitats in the Trinity River and Trinity Bay due to hydrologic changes associated with water withdrawal from the Trinity River (i.e., lower in-stream flows in the river and reduced freshwater inflows into the bay).
- Potential impacts to oyster health (disease, parasites, predators), growth, and production due to altered salinity regimes (concentration and duration).

Mr. Jayson Hudson 401 Coordinator Page 2 of 2 July 28, 2011

- Changes in flow regime and potential impacts to sedimentation of the Trinity River Delta; salinity of Trinity Bay; and altered flooding hydrology of cypress swamps and other forested wetlands along the Trinity River and the Wallisville area.
- Potential impacts (physical removal of nesting habitat and disturbance from human foot traffic and machinery use) to heron, egret, and other bird rookeries during construction of the proposed project.
- Potential impacts to all federal and state-listed rare, threatened, and endangered species and their habitats within a 5-mile vicinity of the project.
- Potential impacts to wildlife movement due to a continuous, east-west barrier (i.e., the 23.5 mile long canal).
- If it is determined that the proposed project may prevent wildlife movement, evaluate the incorporation of wildlife crossings into the project plans in order to facilitate north-south movements by mammals, reptiles, and amphibians away from road crossings.
- Assess the potential secondary impacts to all habitats as a result of the proposed project including whether the canal will prevent hydraulic movement of water across the landscape from the north side of the canal to the south side of the canal.
- The potential for project expansion, such as additional right-of-way, and additional impacts to fish and wildlife habitat.
- Provide a specific schedule for construction.
- Evaluate the cumulative impacts of the proposed project with other projects in the San Jacinto River and Lower Trinity River watersheds including the proposed Grand Parkway Segment H and Segment I-1.

In addition, the applicant should provide a restoration plan as TPWD previously recommended in a letter dated May 26, 2010. TPWD recommended the applicant restore logged habitat on the Harrison mitigation tract which included a reforestation component and an invasive plant species control component to include, but not be limited to, Chinese tallow (*Triadica sebifera*) and deep-rooted sedge (*Cyperus entreriamus*). TPWD stands by our previous recommendation.

Questions can be directed to Mr. Mike Morgan at (281) 534-0146 in Dickinson, Texas.

Sincerely,

Rebecca Hensley

Regional Director, Ecosystem Resources Program

Science and Policy Branch Coastal Fisheries Division

RH:MNM

### David McCullough 400 County Road 2318 Dayton, Texas 77535-6196

Jayson Hudson U.S. Army Corps of Engineers Galveston Division P. O. Box 1229 Galveston, Texas 77553

August 2, 2011

Re: Luce Bayou Project

Dear Mr. Hudson,

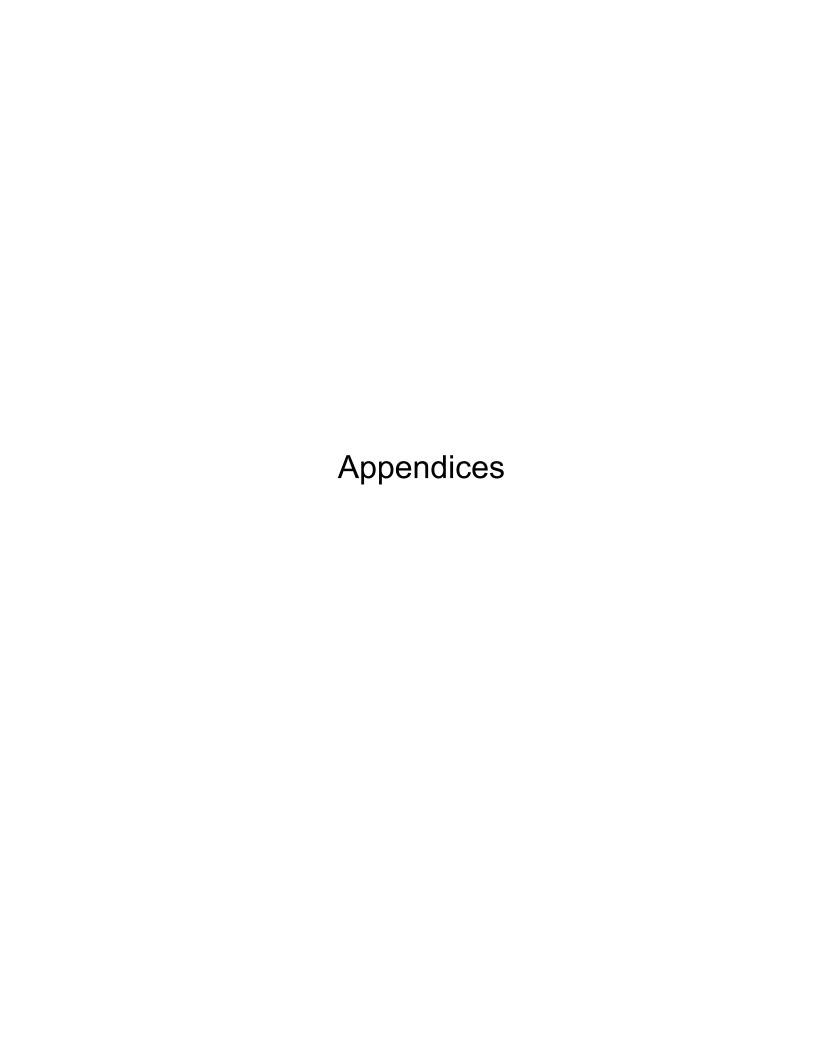
Due to prior commitments I was unable to attend the meeting in Cleveland, July 21.

I would like to know where the project will cross FM 1008 as I own land in this area.

Also, if possible I would request a map of the project.

Thank You

David McCullough

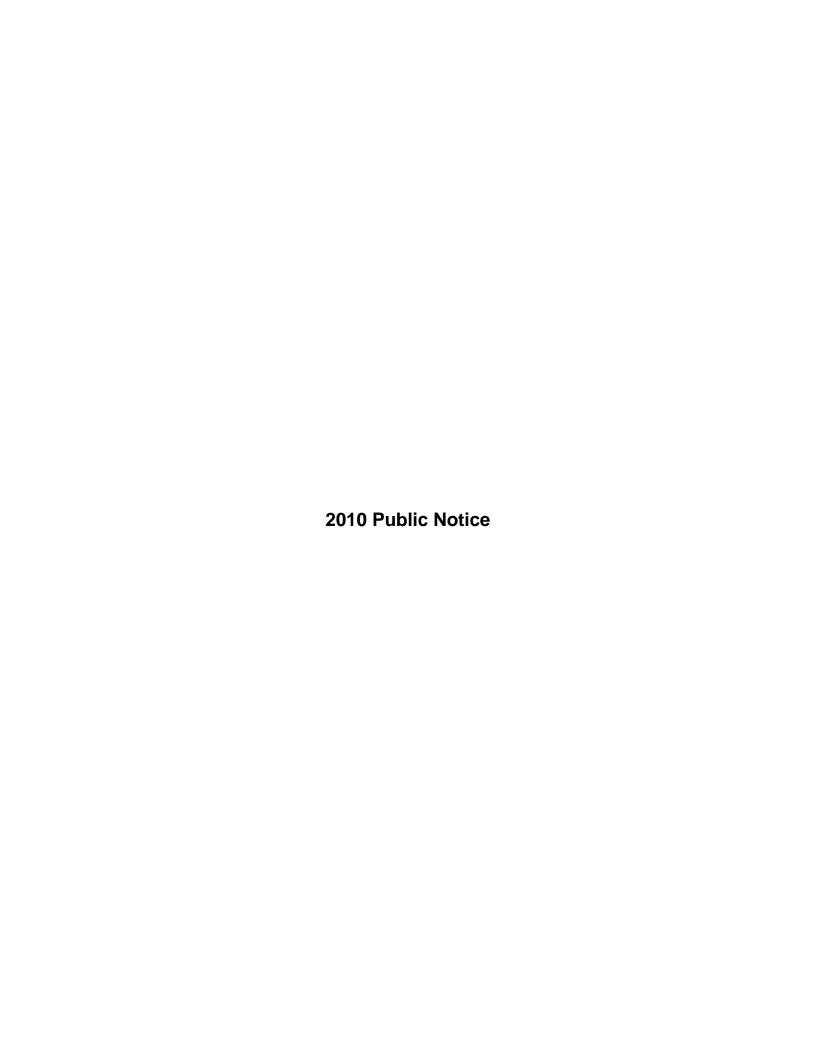


# Appendix A Notices

### **2010 Public Notice**

Notice of Intent – Federal Register, May 25, 2011 2011 Scoping Meeting Announcement Notice

Other Notices: Newspapers and Affidavits of Publication
Website Notice





## **Public Notice**

U.S. Army Corps
Of Engineers
Galveston District

Permit Application No:	SWG-2009-00188
Date Issued:	19 April 2010
Comments Due:	19 May 2010

# U.S. ARMY CORPS OF ENGINEERS, GALVESTON DISTRICT AND TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

**PURPOSE OF PUBLIC NOTICE:** To inform you of a proposal for work in which you might be interested. It is also to solicit your comments and information to better enable us to make a reasonable decision on factors affecting the public interest.

**AUTHORITY:** This application will be eviewed pursuant to Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act.

**APPLICANT:** Coastal Water Authority

One Allen Center

500 Dallas Street, Suite 2800 Houston, Texas 77002-4708

**AGENT:** AECOM

5757 Woodway, Suite 101 West Houston, Texas 77057-1506 Telephone: 713-267-2853 POC: Mr. Donald Ripley, P.E.

**LOCATION:** The project is located starting on the Trinity River approximately six miles east of the intersection of FM 1008 and County Road 2317 in eastern Liberty County with the corridor extending southwestward from the Trinity River to a discharge point near the confluence of Luce Bayou with Lake Houston approximately one mile south of the bridge crossing of FM 2100 and Luce Bayou in Harris County, Texas.

**PROJECT DESCRIPTION:** The proposed project is the conveyance of water from the Trinity River to Lake Houston through an approximate 26.5-mile conveyance structurethat would consist of approximately 3 miles of pipeline (two, 108-inch dameter pipes) and approximately 23.5 miles of a clay-lined earthen canal with berm s, access road, drainage ditches and perim eter fencing. A sedimentation basin and approximate 20-acre sediment storage are proposed where the pipeline transitions to the canal.

Sediment pumped with the TrinityRiver water would be allowed to settle in the sedimentation basin and would be periodically removed so that water entering the canal would contain less sediment. This would thereby reduce the am ount of sedim ent conveyed through the canal and into Lake Houston. Bawl-ground siphons and box culverts are proposed to be constructed where the canal crosses existing roads, easements or utilities and in areas that would require maintenance of existing hydrology that would otherwise be interrupted by the canal and associated structures. Approximately 203.10 acres of jurisdictional aquaticresources were identified within the proposed project footprint, of which approximately 200.95 acres consist of wetlandsand 2.15 acres consist of waters of the United States. Approxim ately 118.93 acres are forested wetlands, 25.55 acres are scrub/shrub, approximately 45.26 acres are emergent wetlands and approximately 11.21 acres are open water associated with wetlands. Of the 2.15 acres of waters of the United States, 0.18 acre is unnamed tributaries, 1.67 acres are the Trinity Ri ver and 0.30 acres are the Lake Houston/Luce Bayou confluence.

After considering avoidance and minimization of adverse impacts to aquatic resources in accordance with the 404(b)(1) guidelines, the applicant has statedthat due to the scale of the proposed project, impacts to all aquatic resources could not be a voided. Therefore, the applicant proposes to compensate for unavoidable impacts by acquiring an approximately 2, 953-acre tract located within the Lower Trinity River Floodplain Habitat Stewardship Program acquisition boundary for the Trinity River National W ildlife Refuge and deeded to the U.S. Fish and W ildlife Service. The proposed mitigation site contains approximately 964 acres of forested wetlands, 6 acres of emergent wetland, 25 acres of scrub/shrub wetlands and an approxim ately 213 acres m issed forested/emergent/scrub/shrub wetland complex.

**NOTES:** This public notice is being issued based on information furnished by the applicant. Further details about the applicant's proposed project, project plans and compensatory mitigation proposal in 44 sheets can be viewed in theientirety on <a href="http://www.swg.usace.army.mil/reg/pn.asp">http://www.swg.usace.army.mil/reg/pn.asp</a>.

A preliminary review of this application indicates that an Environmental Impact Statement (EIS) is not required. Since permit assessment is a continuing process, this preliminary determination of EIS requirement will be changed if data or information brought forth in the coordination process is of a significant nature.

Our evaluation will also follow the guidelines published by the U.S. Environm ental Protection Agency pursuant to Section 404 (b)(1) of the Clean Water Act (CWA).

**OTHER AGENCY AUTHORIZATIONS:** The project site is not located within the Texas Coastal Zone and, therefore, does not require cer tification from the Texas Coastal Managem ent Program.

This project would result in a direct inpact of greater than three acres of waters of the state or 1,500 linear feet of streams (or a combination of the two is above the threshold), and as such would not fulfill Tier I criteria f or the project. Theref ore, Texas Com mission on Environm ental Quality (TCEQ) certification is required. Concurrent with U.S. Arm y Corps of Engineers (Corps) processing of this application, the TCEQ is re viewing this application under Section 401 of the CWA and in accordance with Title 30, Texas Administrative Code Section 279.1-13 to determine if the work would comply with State water quality standards. By virtue of an agreement between the Corps and the TCEQ, this public notice is also issued for the purpose of advising all known interested persons that there is pending before the TCEQ a decision on water quality certification under such act. Any comments concerning this application may be submitted to the Texas Commission on Environmental Quality, 401 Coordinator, MSC-150, P.O.Box 13087, Austin, Texas 78711-3087. The public com ment period extends 30 days from the date of publication of this notice. A copy of the public notice with a description of work is made available for review in the TCEQ's Austin office. The complete application may be reviewed in the Corps ofice listed in this public notice. The TCEQ nay conduct a public meeting to consider all comments concerning water quality if requested in writing. A request fo r a public m eeting m ust contain the following information: the name, mailing address, application number, or other recognizable reference to the application; a brief description of the interest of the requester, or of persons represented by the requester; and a brief description of how the application, if granted, would adversely affect such interest.

**NATIONAL REGISTER OF HISTORIC PLACES:** The staff archaeologist has reviewed the latest published version of the National Register of Historic Places, lists of properties determined eligible, and other sources of information. The following is current knowledge of the presence or absence of historic properties and the effects of the undertaking upon these properties:

A reconnaissance level inventory has resu lted in the identification of cultural resources potentially eligible for inclusion in the national register of historic places as documented in the draft report titled "A Reconnaissance-Level Cultural Resources Survey and Historic Evaluation of the Luce Bayou Interbasin Transfer Project, Harris and Liberty Counties, Texas" dated March 2010 and prepared by Moore Archeological Consulting. The draft report is currently being coordinated with the State Historic Preservation Officer (SHPO) and the Corps. The Corps is consulting with the applicant and the SHPO to determine what additional investigation will be required.

**THREATENED AND ENDANGERED SPECIES:** Threatened and/or endangered species or their critical habitat may be affected by the proposed wok. Consultation with the U.S. Fish and Wildlife will be initiated to assess the effect on endangered species.

**ESSENTIAL FISH HABITAT:** This notice initiates the Essential Fish Habitat consultation requirements of the Magnuson-Stevens Fishery C onservation and Management Act. Our initial determination is that the proposed action would nothave a substantial adverse impact on Essential Fish Habitat or federally managed fisheries in the Gulfof Mexico. Our final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the National Marine Fisheries Service.

**PUBLIC INTEREST REVIEW FACTORS:** This application will be reviewed in accordance with 33 CFR 320-332, the Regulatory Programs of the Corps, and other pertinent laws, regulations and executive orders. The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits, which reasonably m ay be expected to accrue from the proposal, m ust be balanced against its reasonably foreseeable detriments. All factors, which may be relevant to the proposal, will be considered: among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, meral needs and, in general, the needs and welfare of the people.

Solicitation of Comments: The Corps is soliciting comments from the public, Federal, State, and local agencies and officials, Indian tribes and other interested paties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environm ental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Impact Assessm ent and/or an Environmental Impact Statement pursuant to theNational Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

This public notice is being distributed to all known iterested persons in order to assist in developing facts upon which a decision by the Corps m ay be based. For accuracy and com pleteness of the record, all data in support of or in opposition to the proposed work should be submitted in writing setting forth sufficient detail to furnish a cl ear understanding of the reasons for support or opposition.

**PUBLIC HEARING:** Prior to the close of the comment period any person may make a written request for a public hearing setting forth the particular reasons for the request. The District Engineer will determine whether the issues are substantial and should be considered in the permit decision. If a public hearing is warranted, all known interested persons will be notified of the time, date, and location.

CLOSE OF COMMENT PERIOD: All comments pertaining to this Public Notice must reach this office on or before 19 May 2010. Extensions of the comment period may be granted for valid reasons provided a written request is received by the liming date. If no comments are received by that date, it will be considered that there are no objections. Comments and requests for additional information should be submitted to:

Jayson M. Hudson Regulatory Branch, CESWG-PE-RB U.S. Army Corps of Engineers P.O. Box 1229 Galveston, Texas 77553-1229

409-766-3108 Phone 409-766-6301 Fax

DISTRICT ENGINEER GALVESTON DISTRICT CORPS OF ENGINEERS This page intentionally left blank.

**Notice of Intent** 

Federal Register, May 25, 2011



and alternatives and to solicit input and feedback from the public on issues to be addressed in the PEIS. Meetings will be announced in local media. The public will also be invited to review and comment on the Draft PEIS when it is released. Comments from the public will be considered before any decision is made regarding implementing the proposed action.

### Brenda S. Bowen,

Army Federal Register Liaison Officer. [FR Doc. 2011–12914 Filed 5–24–11; 8:45 am] BILLING CODE 3710–08–P

### **DEPARTMENT OF DEFENSE**

# Department of the Army; Corps of Engineers

Public Scoping Meeting and Preparation of Environmental Impact Statement for Luce Bayou Interbasin Transfer Project in Liberty County and Harris County, TX

**AGENCY:** Department of the Army, U.S. Army Corps of Engineers, DoD. **ACTION:** Notice of intent.

SUMMARY: The U.S. Army Corps of Engineers, Galveston District, has received a permit application for a Department of the Army Permit pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) and Section 404 of the Clean Water Act (33 U.S.C. 1344) from the Coastal Water Authority (SWG-2009-00188) for the proposed Coastal Water Authority's Luce Bayou Interbasin Transfer Project located in eastern Liberty County with the 26.5-mile corridor extending southwestward from the Trinity River to a discharge point near the confluence of Luce Bayou with Lake Houston. The primary Federal involvement associated with the proposed action is the discharge or dredged or fill material into waters of the United States, including jurisdictional wetlands, and the construction of structures that may affect navigable waters. Federal authorizations for the proposed project would constitute a "major federal action." Based on the potential impacts, both individually and cumulatively, the Corps intends to prepare an Environmental Statement (EIS) in compliance with the National Environmental Policy Act to render a final decision on the permit applications.

The Corps' decision will be to either issue, issue with modification or deny Department of the Army permits for the proposed action. The EIS will assess the potential social, economic and

environmental impacts of the construction and operation of the interbasin conveyance, associated facilities, and appurtenances and is intended to be sufficient in scope to address Federal, State and local requirements, environmental issues concerning the proposed action, and permit reviews.

DATES: The scoping period will commence with the publication of this notice. The formal scoping period will end 60 days after the publication of this notice. Comments regarding issues relative to the proposed project should be received.

ADDRESSES: You may submit comments by any of the following methods: Mail: Jayson M. Hudson, U.S. Army Corps of Engineers, Regulatory Branch, P.O. Box 1229, Galveston, TX 77553-1229; Fax: (409) 766-3931 or E-mail: lavson.m.hudson@usace.army.mil. Emailed comments, including attachments, should be provided in .doc, .docx, .pdf or .txt formats. Documents pertinent to the proposed project may be examined at http:// www.swg.usace.army.mil/reg/eis.asp. FOR FURTHER INFORMATION CONTACT: Mr. Jayson Hudson, (409) 766–3108. SUPPLEMENTARY INFORMATION: The Galveston District intends to prepare a DEIS on the proposed Luce Bayou Interbasin Transfer Project which is the proposed transfer of water from the Trinity River in Liberty County to Lake Houston in Harris County, TX. The Coastal Water Authority proposed this project and is the applicant for the Department of the Army permit (DA) SWG-2009-00188.

1. Project Background: The Coastal Water Authority is proposing to convey up to 400 million gallons of water per day (MGD) under gravity in accordance with the City of Houston's existing water rights permit from the Trinity River to Lake Houston, a distance of approximately 26.5 miles. The Trinity River water would be conveyed from the proposed pump station through large diameter pipelines to a sediment storage and settling basin and then through an earthen canal to outfall at the Lake Houston discharge point. The canal would have side berms and there would be an access road, drainage ditches, and perimeter fencing surrounding the water conveyance canal. The proposed project consists of the following:

a. A new water pumping station will be constructed on the Trinity River at Capers Ridge approximately 10 miles north of Dayton, TX.

b. Dual, 108-inch diameter force mains will be constructed extending from the Capers Ridge pump station approximately 3.5 miles to the west and southwest to outfall to the sedimentation settling basin.

c. An approximate 20-acre sedimentation settling and storage basin.

d. An approximate 23.5 mile claylined earthen canal with 4:1 side slopes within a 300-foot easement that would include access roads, berms, chain link perimeter fencing, flow control structures, and metering stations.

e. Box culverts at canal and roadway crossings and multiple bawl-ground siphons constructed to facilitate wildlife movement and maintain existing hydrology along the canal conveyance system.

f. An approximate 10-acre

maintenance facility located
approximately 6 miles north of Dayton,
TX.

g. Discharge structure along the southeastern shoreline of Lake Houston.

Scoping and Public Involvement Process: A Public Notice was published on April 19, 2010 to initiate the public scoping process for the proposed project. At that time, based on information provided by the Applicant, a preliminary review indicated that an **Environmental Impact Statement (EIS)** was not required. However, based on continuing permit assessment and information brought forth during the initial coordination process, areas of potential significant impact on the human environment have been identified. Therefore, the EIS process is being implemented so that the permit application can be fully evaluated and a permit decision can be made. All comments received to date, including those provided for review during the initial scoping process, will be considered by the Galveston District during EIS preparation. The purpose of the EIS scoping meeting is to gather information on the subjects to be studied in detail by the EIS.

3. Purpose and Need. The basic purpose of the proposed action is to provide drinking water for the City of Houston and surrounding area. The overall purpose is to provide drinking water utilizing water rights currently held by the City of Houston in the Trinity River. The Corps recognizes that there is a public and private need for

drinking water.

4. Alternatives. An evaluation of alternatives to the Applicant's preferred alternative initially being considered includes a No Action alternative, alternatives that would avoid, minimize and compensate for impacts to the aquatic environment within the project right-of-way, alternatives that would avoid, minimize and compensate for

impacts to the aquatic environment outside of the right-of-way, alternatives utilizing alternative practices, and other reasonable alternatives that will be developed through the project scoping process which may also meet the identified purpose and need.

- 5. Public Involvement. The purpose of the public scoping process is to determine relevant issues that will influence the scope of the environmental analysis and EIS alternatives. General concerns in the following categories have been identified to date: potential direct effects to waters of the United States including wetlands; water quality; aquatic species; air quality; environmental justice; socioeconomic environment; archaeological and cultural resources; recreation and recreational resources; energy supply and natural resources; hazardous waste and materials; aesthetics; public health and safety; navigation; erosion and accretion; invasive species; cumulative impacts; public benefit and needs of the people along with potential effects on the human environment. All parties who express interest will be given an opportunity to participate in the process.
- 6. Coordination. The proposed action is being coordinated with a number of Federal, State, regional and local agencies including but not limited to the Environmental Protection Agency, the United States (U.S.) Fish and Wildlife Service, U.S. National Marine Fisheries Service, the Texas Commission on Environmental Quality, the Texas General Land Office, and the Texas Parks and Wildlife Department. Other agencies, including the Trinity River National Wildlife Refuge, Texas Water Development Board, and the Texas Department of Transportation, may also comment during the scoping process.
- 7. Availability of the Draft EIS. The Corps currently expects the Draft EIS to be made available to the public by December 2011. A public scoping meeting will be held at the Dayton Community Center in Dayton, Texas. The Corps will announce the public scoping meeting through local news media and the Corps' webpage at http://www.swg.usace.army.mil/reg at least 15 days prior to the first meeting.

# Brenda S. Bowen,

Army Federal Register Liaison Officer. [FR Doc. 2011–12912 Filed 5–24–11; 8:45 am] BILLING CODE 3720–58–P

### **DEPARTMENT OF DEFENSE**

Department of the Army; Corps of Engineers

Withdrawal of Notice of Intent To Prepare a Programmatic Environmental Impact Statement for the Chesapeake Bay Oyster Recovery Project, Virginia & Maryland

**AGENCY:** Department of the Army, U.S. Army Corps of Engineers, DoD.

**ACTION:** Notice of intent; withdrawal.

SUMMARY: The U.S. Army Corps of Engineers (Corps), Baltimore and Norfolk Districts published a notice of intent (NOI) (74 FR 47927) for the Chesapeake Bay Oyster Recovery, MD and VA study on September 18, 2009. That NOI announced that the Corps Baltimore and Norfolk Districts would prepare a single, integrated Native Oyster Restoration Master Plan (master plan) and programmatic environmental impact statement (PEIS) for native oyster recovery in the entire Chesapeake Bay (inclusive of both Maryland and Virginia) and that the document would be tiered to the *Programmatic EIS* for Oyster Restoration in Chesapeake Bay Including the Use of a Native and/or Nonnative Oyster. In August 2009, the record of decision for Oyster Restoration in Chesapeake Bay including the Use of a Native and/or Non-Native Species was signed. The preferred alternative identified in the 2009 PEIS recommends "using a combination of alternatives that involves only the native Eastern oyster (Crassostrea virginica)." Consistent with the preferred alternative, the Corps will expand upon and further develop plans and recommendations for Chesapeake Bay native oyster restoration in the master plan. However since the master plan will not be identifying site-specific construction areas for restoration and the larger issue of oyster restoration Bay-wide, has been reviewed, a PEIS for the master plan is no longer warranted. Therefore, the Corps is withdrawing its NOI to prepare a PEIS.

FOR FURTHER INFORMATION CONTACT: Ms. Susan Conner, Norfolk District U.S. Army Corps of Engineers, Attn:
CENAO-PM-PA, 803 Front Street, Norfolk, VA 23510. E-mail address:
Susan.L.Conner@usace.army.mil and phone number: 757-201-7390 or Ms. Anna Compton, Baltimore District, U.S. Army Corps of Engineers, Attn:
CENAB-PL-P, P.O, Box 1715, Baltimore, MD 21203. E-mail address: Anna.M.Compton@usace.army.mil and phone number 410-962-4633.

SUPPLEMENTARY INFORMATION:

- 1. The Baltimore District previously published a NOI (69 FR 68887) for the Chesapeake Bay Oyster Recovery, MD and VA study on November 26, 2004. That NOI indicated that the Baltimore District would prepare a draft EIS for native oyster (*Crassostrea virginica*) recovery activities within Maryland waters of the Chesapeake Bay. A second NOI (71 FR 14857) was published for the Chesapeake Bay Oyster Recovery, MD and VA study on March 24, 2006. That NOI announced that the Corps Baltimore and Norfolk Districts would prepare a single, integrated master plan and PEIS for native oyster recovery in the entire Chesapeake Bay.
- 2. A third NOI was published on September 18, 2009 (74 FR 47927) to announce that the timing of the master plan/PEIS was delayed so that the document could be tiered to the Programmotic EIS for Oyster Restoration in Chesapeake Bay Including the Use of a Native and/or Nonnative Öyster. In August 2009 the record of decision for Oyster Restoration in Chesapeake Bay including the Use of a Native and/or Non-Native Species was signed. The preferred alternative identified in the PEIS recommends "using a combination of alternatives that involves only the native Eastern oyster (Crassostrea virginica)." Consistent with the preferred alternative, the Corps will expand upon and further develop plans and recommendations for Chesapeake Bay native oyster restoration in the master plan. The master plan will not identify individual, site specific, construction projects. The master plan, instead, will develop a comprehensive approach to oyster restoration and will lay out a road map for a long-term, large-scale restoration of native oysters in the entire Chesapeake Bay. For each area identified for restoration and when Corps appropriations are received, necessary National Environmental Policy Act (NEPA) documents will be prepared to specifically describe the scope, scale, and details of construction of site specific oyster projects. Therefore the Programmatic EIS for Oyster Restoration in Chesapeake Bay Including the Use of a Native and/or Nonnative Oyster prepared in August 2009 is sufficient and appropriate to support the plans laid out in the master plan precluding the need for another PEIS. The master plan will incorporate science, policy, and experience from a number of sources to develop a comprehensive approach to oyster restoration in Maryland and Virginia. All suitable locations and techniques available for native oyster restoration will be identified and explored, and, if



### LUCE BAYOU INTERBASIN TRANSFER PROJECT

Jayson M. Hudson U.S. Army Corps of Engineers Regulatory Branch P.O. Box 1229 Galveston, Texas 77553-1229 Jayson.M.Hudson@usace.army.mil www.swg.usace.army.mil/reg

# SAVE THE DATE



# **U.S. Army Corps of Engineers**Galveston District

# **Public Scoping Meeting**

Environmental Impact Statement for the Luce Bayou Interbasin Transfer Project

# July 21, 2011

5:30pm - 8pm

Dayton Community Center

801 S. Cleveland St, Dayton, TX



# **Purpose**

The purpose of this Environmental Impact Statement (EIS) public scoping meeting is (1) to provide information on the proposed project and alternatives and (2) to obtain information from the community concerning the subjects to be studied in detail by the EIS.

The purpose of the Luce Bayou Interbasin Transfer Project (LBITP) is to provide drinking water for the City of Houston and the surrounding area using the City's existing right to withdraw water from the Trinity River.

# **EIS Public Scoping Meeting Schedule**

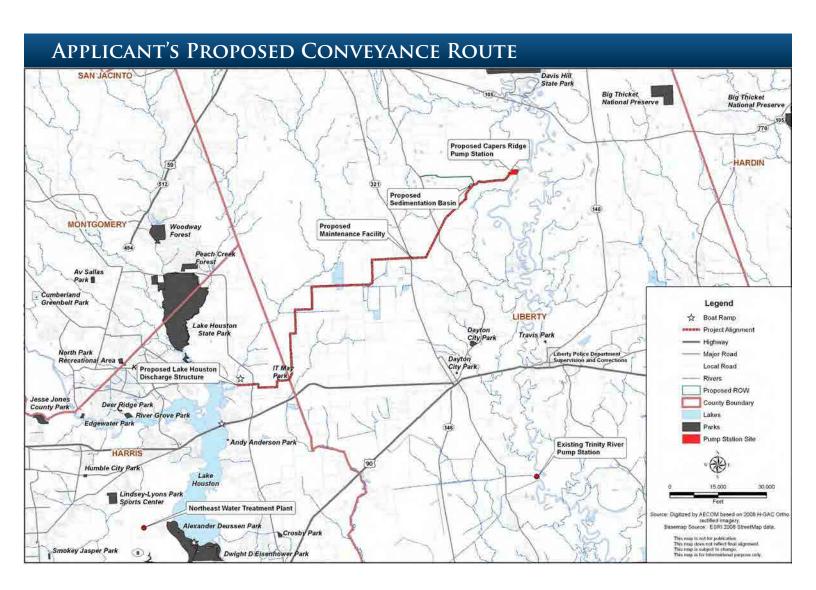
	o ocoping mooning contour
5:30pm	Registration, public commen sign-up, project exhibits and information review
6:30pm	Welcome and Introductions
6:45pm	Presentation
7:00pm	Public Comment Period
	Adjournment

### haak

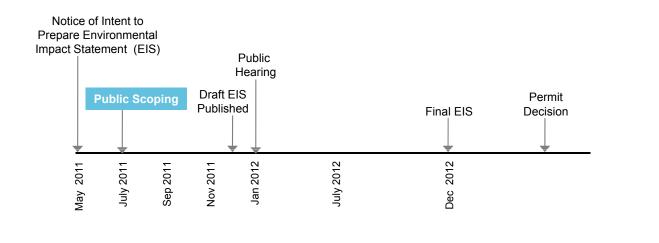
The City of Houston needs water by 2020 to meet water demand as identified by the City and included in the approved 2012 State Water Plan.

# Goals

The goal of the EIS is to fully assess the potential social, economic, and environmental impacts of the construction and operation of the LBITP so that the Corps of Engineers may make their decision on the Department of the Army permit application to allow the LBITP to proceed in accordance with Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act. Your participation in the EIS process is appreciated; for your convenience, the facilities are ADA compliant and ASL and Spanish translators will be available. The Corps expects that the Draft EIS and related materials will be made available by December 2011 from their website at http://www.swg.usace.army.mil/reg



# **PROCESS**



**Newspaper Notices with Affidavits of Publication** 

# AFFIDAVIT OF PUBLICATION

### STATE OF TEXAS:

# COUNTY OF HARRIS:

Before me, the undersigned authority, a Notary Public in and for the State of Texas, on this day personally appeared, the Newspaper Representative at the HOUSTON CHRONICLE, a daily newspaper published in Harris County, Texas, and generally circulated in the Counties of: HARRIS, TRINITY, WALKER, GRIMES, POLK, SAN JACINTO, WASHINGTON, MONTGOMERY, LIBERTY, AUSTIN, WALLER, CHAMBERS, COLORADO, BRAZORIA, FORT BEND, GALVESTON, WHARTON, JACKSON, and MATAGORDA and that the publication, of which the annexed herein, or attached to, is a true and correct copy, was published to-wit:

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NEWSPAPER REPRESENTATIVE

Sworn and subscribed to before me, this the 6th Day of July A.D. 2011 MINIMINION,





Public Scoping Meeting for Luce Bayou Interbasin Transfer Project Environmental Impact Statement: The U.S. Army Corps of Engineers, Galveston District (SWG) will hold one public scoping meeting on July 21, 2011 from 5:30 pm - 8:00 pm at the Dayton Community Center located at 801 South Cleveland Street in Dayton, Texas 77535. The purpose of the meeting is to receive comments on the scope of the proposed Luce Bayou Interbasin Transfer Project (LBITP) Environmental Impact Statement (EIS) pertaining to the Clean Water Act Section 404 permit application submitted by Coastal Water Authority (SWG-2009-00188). The public may provide verbal or written comment during the public scoping meeting. Documents pertinent to the proposed project may be examined at http://www.swg.usace.army.mil/reg
COMMENTS: Written comments may be submitted by July 29, 2011 to be considered by the Draft EIS.
Mailing address: Mr. Jayson M. Hudson, U.S. Army Corps of Engineers, Regulatory Branch, P.O. Box 1229, Galveston, Texas 77553-1229; Fax: (409) 766-3931; or by Email: Jayson.M.Hudson@usace.army.mil.
NOTICE OF INTENT: The LBITP EIS Scoping period extends from May 25, 2011 and is available at: http://www.gpo.gov/fds ys/pkg/FR-2011-05-25/html/2011-12912.htm The LBITP EIS scoping period extends from May 25, 2011 through July 29, 2011.

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PUT JULIETT NEWSPAPER REPRESENTATIVE

Sworn and subscribed to before me, this the 10th Day of July A.D. 2011

Notary Public in and for the State of Texas

Reunión pública para describir la declaración de consecuencias e impactos ambientales del proyecto de la transferencia de aguas del Riachuelo Luce: El US Army Corps of Engineers, Districto de Galveston (SWG) celebrará una reunión pública para la descripcion el 21 de Julio de 2011 de 5:30 P.M. - 8:00 P.M. en el Dayton Community Center situado en la 801 South Cleveland Street, Dayton, Texas 77535. El propósito de la reunión es recibir comentarios sobre el alcance de la declaración de serecibir comentarios sobre el alcance de la declaración de serecibir comentarios sobre el alcance de la declaración de serecibir comentarios sobre el alcance de la declaración de serecibir comentarios sobre el alcance de la declaración de serecibir comentarios sobre el alcance de la declaración de aguas del Riachuelo Luce (Luce Bayou Interbasin Transfer-LBITP) referente a la solicitud del permiso de la sección 404 del Clean Water Act presentada por la Coastal Water Authority (SWG-2009-00188). El público puede proporcionar el comentario verbal o escrito durante la reunión pública de la descripcion. Los documentos en relación con el proyecto propuesto se pueden examinar en http://www.swg.usace.army.mi/reg.

COMENTA: Los comentarios escritos se pueden examinar en http://www.swg.usace.army.mi/reg.

COMENTA: Los comentarios escritos se pueden someter antes del 29 de Julio de 2011 para ser considerado por el Draft Els. Dirección de envío: Mr. Jayson M. Hudson, US Army Corps of Engineers, Regulatory Branch, P.O. Box 1229, Galveston, Texas 77553-1229; Fax: (409) 766-3931; o por Email: Jayson.M.Hudson @usace.army.mil.

AVISO DE INTENTO: El aviso de la descripcion de la descripcion de les de la descripcion de la descripcion



P. O. Box 9189 • 1939 Trinity • Liberty, Texas 77575 • 936-336-3611 • Fax: 936-336-3345

# **PUBLISHER'S AFFIDAVIT**

State of Texas County of Liberty

County of Elberty
BEFORE ME, THE UNDERSIGNED NOTARY, CUROL SHOWLS
ON THIS DAY OF Quly
APPEARED CICLOSTA [name of affiant], KNOWN TO ME TO
BE A CREDIBLE PERSON AND OF LAWFUL AGE, WHO BEING BY ME FIRST
DULY SWORN, ON HIS/HER OATH, DEPOSES AND SAYS:
The attached Public Scoping Ulethros Approved by Accom-Karen B. Kottke
Appeared in THE VINDICATOR, a newspaper printed in Liberty,
Liberty County, Texas for weeks,
Starting:
Publisher's Cost: \$ 18,40
Name: Erwith Huddak Publisher's Rep.)
Signed: Cliquetudada Publisher (Publisher's Rep.)
O TOTAL OF THE PROPERTY OF THE
The supplied the supplied belong to the supplied to the suppli
SWORN TO AND SUBSCRIBED BEFORE ME ON THE DAY of
[month] [year], BY [wash   Mame of affiant]
[ PARSON SHEWESeal]
Notary Public, State of Texas
Commission Expires 07/01/2014 Notary Public's Signature

# Classifieds

Public Scoping Meeting for Luce Bayou Interbasin Transfer Project Environmental Impact Statement: The U.S. Army Corps Engineers, Galveston District (SWG) will hold one public scoping meeting on July 21, 2011 from 5:30 pm - 8:00 pm at the Dayton Community Center located at 801 South Cleveland Street in Dayton, Texas 77535. The purpose of the meeting is to receive comments on the scope of the proposed Luce Bayou Interbasin Transfer Project (LBITP) Environmental Impact Statement (EIS) pertaining to the Clean Water Act Section 404 permit application submitted by Coastal Water Authority (SWG-2009-00188). The public may pro-vide verbal or written comment during the public scoping meeting. Documents pertinent to the proposed project may be examined at http://www.swg. usace.army.mil/ reg

COMMENTS: Written comments may be submitted by July 29, 2011 to be considered by the Draft EIS. Mailing address: Mr. Jayson M. Hudson, U.S. Army Corps of Engineers, Regulatory Branch, P.O. Box 1229, Galveston, 77553-Texas 1229; Fax: (409) 766-3931; or by Email: Jayson.M.Hudson @usace.army.mil. Notice of Intent: The LBITP EIS Notice of Intent was published on May 25, 2011 and is available at: http://www. gpo.gov/fdsys/ pkg/FR-2011-05-25/htm1/2011-12912.htm LBITP EIS scoping period extends from May 25, 2011 through July 29, 2011.



# AFFIDAVIT OF PUBLICATION

# STATE OF TEXAS COUNTY OF LIBERTY

My commission expires on (stamp) \_\_

Personally appeared before the undersigne County and State. <u>Karin Coleman</u> , Reprebulisher of the <u>Cleveland/Eastex Advocated</u> circulation in the County of <u>Liberty</u> , State of under oath that the report of <u>Legal Notices</u> was published in said newspapers in its issues.	esentative for <u>James Hopson</u> , e and Dayton News a newspaper of general of Texas. Who being duly sworn, states , a true copy of which is hereto annexed
GtL_day of Ju	2011
day of gar	, 2011
day of	, 2011
day of	, 2011
day of	, 2011
	Karin Coleman Publisher's Representative
Sworn to and subscribed before me this	6th day of July, 2011.
Notary Public	SUSAN MARIE CURR Notary Public, State of Texas My Commission Expires



# AFFIDAVIT OF PUBLICATION

# STATE OF TEXAS COUNTY OF LIBERTY

My commission expires on (stamp) \_

Personally appeared before County and State. <u>Karin County and State. Karin County of the Cleveland/circulation in the County of under oath that the report was published in said news</u>	Coleman , Represe Eastex Advocate a Liberty, State of T of Legal Notices, a	entative for nd Dayton New exas. Who bein true copy of w	<u>James Hopson</u> , <u>s</u> a newspaper of general ng duly sworn, states
6th	day of Jul	4	, 2011
	day of		, 2011
	day of		, 2011
-	day of		, 2011
		Karin	Publisher's Representative
Sworn to and subscribed be	efore me this	day_day	of July, 2011.
Notary Public	MC	SUSAN MARIE Notary Public, Stat My Commission November 08,	e of Texas Expires

# PUBLISHER'S AFFIDAVIT

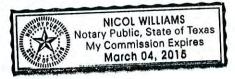
I solemnly swear that the ab	ove and foregoing notice was published in the Liberty Gazette, a
newspaper printed and circulated in	Liberty County, Texas, on
TULY 5	, 2011, the date of the publication. A copy of the
notice as published, clipped from the	e newspaper, is attached hereto.
	Cynthia Smith, Publisher
	U CYNTHIA SMITH, Publisher
SWORN TO AND SUBSCR	IBED BEFORE ME by CYNTHIA SMITH this 28th day of
	2011, to certify which witness my hand and seal of
office.	
	Mirol Williams

# LEGAL NOTICE

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Notary Public in and for the

State of Texas



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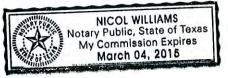
I solemnly swear that the abo	ove and foregoing notice was published in the Liberty Gazette, a
newspaper printed and circulated in	Liberty County, Texas, on
TULY 5	, 2011, the date of the publication. A copy of the
notice as published, clipped from the	newspaper, is attached hereto.
	CYNTHIA SMITH, Publisher
	CYNTHIA SMITH, Publisher
	anth
SWORN TO AND SUBSCRI	BED BEFORE ME by CYNTHIA SMITH this 28th day of
	2011, to certify which witness my hand and seal of
office.	
	Charol Williams

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Notary Public in and for the

State of Texas





# AFFIDAVIT OF PUBLICATION

# STATE OF TEXAS **COUNTY OF HARRIS**

My commission expires on (stamp) \_

Personally appeared before the undersigned, a Notary Public within and for said County and State. Karin Coleman, Representative for James Hopson, Publisher of the Lake Houston Observer, a newspaper of general circulation in the County of Harris, State of Texas. Who being duly sworn, states under oath that the report of Legal Notices, a true copy of which is hereto annexed was published in said newspapers in its issue(s) of the

7th day of Ju	<u>ly</u> , 2011
day of	, 2011
day of	, 2011
day of	, 2011
	Larin Coleman
	Publisher's Representative
Sworn to and subscribed before me this	the day of July, 2011.
Susan M. C.	
Notary Public	SUSAN MARIE CURR
My commission expires on (stamp)	Notary Public, State of Texas  My Commission Expires November 08, 2014

# Announcements Legals

# **Legal Notices**

Public Scoping Meeting for Luce Bayou Interbasin Transfer Project Environmental Impact Statement: The U.S. Army Corps of Engineers, Galveston District (SWG) will hold one public scoping meeting on July 21, 2011 from 5:30 pm — 8:00 pm at the Dayton Community Center located at 801 South Cleveland Street in Dayton, Texas 77535. The purpose of the meeting is to receive comments on the scope of the proposed Luce Bayou Interbasin Transfer Project (LBITP) Environmental Impact Statement (EIS) pertaining to the Clean Water Act Section 404 permit application submitted by Coastal Water Authority (SWG-2009-00188). The public may provide verbal or written comment during the public scoping meeting. Documents pertinent to the proposed project may be examined at http://www.swg.usace.army.mil/reg
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The LBITP EIS scoping period
extends from May 25, 2011
through July 29, 2011.
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Planning

Projects

**Public Affairs** 

Recreation

Regulatory

Safety

Small Business

WHO WE ARE

VE ARE MISSIONS

Newsroom

# Corps to host public scoping meeting for Coastal Water Authority's Luce Bayou Interbasin Transfer Project

GALVESTON, Texas (July 5, 2011) - The U. S. Army Corps of Engineers Galveston District received a permit application for a Department of the Army permit (SWG-2009-00188) from the Coastal Water Authority's Luce Bayou Interbasin Transfer project, for which an Environmental Impact Statement will be prepared. The Corps will host a public scoping meeting July 21, located in the Dayton Community Center at 801 S. Cleveland St. Dayton, Liberty County, Texas. (read more)

# USACE Galveston Deputy District Engineer for Programs and Project Management retires after 47 years of federal service

GALVESTON, Texas (July 1, 2011) - On June 8, 1964, only a week after his college graduation and 10 days after his wedding to his wife Cathy, Lamar University graduate Arthur J. Janecka drove up to the U.S. Army Corps of Engineers Galveston District's headquarters building in an aqua Chevelle, ready to report for duty as part of an 18-month civil engineering intern training program where he would earn \$5,650 in his first year. (read more)

# Texas teachers visit USACE Galveston's Colorado River Locks

MATAGORDA COUNTY, Texas (June 29, 2011) - Approximately 40 school teachers from the State of Texas visited the U.S. Army Corps of Engineers Galveston District's Colorado River Locks as part of a workshop hosted by the Texas Department of Parks and Wildlife, June 29. (read more)

S HISTORY

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### Segment E Permit

Current information about the Segment E Permit

**Hot Topics** 



Click here for Galveston District HOT TOPICS

# **Project Update Reports**



# **Addicks and Barker Dam Safety**



Click here for more information or visit rww.addicksandbarkor.info

# Social Media



**Corps Reporting** 



**Family Readiness** 



WATER SAFETY PROGRAM

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# Appendix B 2011 Scoping Meeting

Sign-in Registration Sheets, Speaker Cards, and Comment Sheets From Meeting



# PUBLIC SIGN-IN SHEET



JULY 21, 2011
DAYTON COMMUNITY CENTER
801 S. CLEVELAND STREET
DAYTON, TEXAS



NO.	NAME (PLEASE PRINT)	ADDRESS	PHONE
1. 🗸	Manny De Pan	10777 Westheimer, Sk. 400 Houson, To 770 42	281-553-8700
2. <sub>V</sub>	Charles Shumate	10777 Westheimer Ste 400 Houston, TX. 77042	281 .558.8700 936-334-2004
	John Steven Bush	P.D.Box 896 HARDIN TEX. 74561	936-334-2004
4.	T.L. Cox	CLEVELAND, TX 77328-1493	281-592-1003
	Mike Bagstad	lovy Shephirel Jornston TX 77056	281-224-3947
	Augustur Campbell	900 Backy Houston, TX 77002	832-393-6486
7.	Richard CRON		713-306-4905
8.	Deben Dean	310 Stone Dayton, TX 77535	936346355
	LARRY BRANNEN	439 Hwy 90 Liberty TX 775 75	713-705-1236
II.	HERSHEL BRANNEN	313 HWY 90, LIBERTY, TX 77575	337-302-0388

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#### PUBLIC SIGN-IN SHEET

## PUBLIC SCOPING MEETING – PROPOSED LUCE BAYOU INTERBASIN TRANSFER PROJECT IN LIBERTY AND HARRIS COUNTIES, TEXAS

**JULY 21, 2011** 

DAYTON COMMUNITY CENTER 801 S. CLEVELAND STREET

DAYTON, TEXAS



NO.	NAME (PLEASE PRINT)	ADDRESS	PHONE
1.	GARY NORADAT	On Alla Center AUTHORITY	713 658-9020 X-26
2.	Tony L. Guncie	l (	713-868-6900
3.	DON RIPLEY	AECOM	713-2672853
4.	Flogd + Gail Page	1238 CR 3327 Dayton, Tx 77535	281593-9039
5. V	GITI ZARINKEUK	CWA	713-7245489
6.	Lisa Lattu	611 Walker St; 18th Fl 77002	932
7. 🗸	LISA & FREL MAJORS	10855 HWY.321 DAYTON, TR. M7535	
8. 1	LEO SHIPMAH	6425 FM 686 TX 77535	936 391 5836
9.	Wayne Klotz	CWA	
10. √	MARCEL KHOUW	PATE / CHCRWA	(713) 462 3178

#### PUBLIC SIGN-IN SHEET

PUBLIC SCOPING MEETING – PROPOSED LUCE BAYOU INTERBASIN TRANSFER PROJECT IN LIBERTY AND HARRIS COUNTIES, TEXAS

JULY 21, 2011

DAYTON COMMUNITY CENTER 801 S. CLEVELAND STREET

DAYTON, TEXAS



NO.	NAME (PLEASE PRINT)	ADDRESS	PHONE
1.	Alan Counter	3010 Fm 1409 DAytow, TX	936-258-7235
	ROBERT HANSCAI	TEEP-AUSTIN	512 789 458
3.	Dagon Afinowers	3100 hilaret Houston TY 77042	717-600-6841
	Melecib Franco	Dayton News	837-877-8699
5.	Richard BunsTead	2435 WOIF RD HUFFMAN	7138385472
6.	Wilson Fregis	8421FM 1409 Dayton	936-258-3864
7.	Barbara Fregia	8421 FM 1409 Dayton	936 258 3864
	Victoria Herrin	8\$21 FM 1409 Douton Houston Wildenders 4916 Main St., Houston, TX	713/524-7330
9.	Ron Holcomb	2163 Cos St. LIBERTY, TX 77575	936.336.4558,xt2
	Enell Cooper	27323 Huffman-Cleveland Huffman	281-883-6146

## PUBLIC

#### **SIGN-IN SHEET**

## PUBLIC SCOPING MEETING – PROPOSED LUCE BAYOU INTERBASIN TRANSFER PROJECT IN LIBERTY AND HARRIS COUNTIES, TEXAS

**JULY 21, 2011** 

DAYTON COMMUNITY CENTER 801 S. CLEVELAND STREET

DAYTON, TEXAS



NO.	NAME (PLEASE PRINT)	ADDRESS	PHONE
1.	Brandt Mannchen	5431 Curew Heresten, Tx. 27096	213-6645962
2.	Showri Neudagini	3648 PM 1960 W Honston of 77068	281 440 3924
3.		POBOX 637 Doyton (x.77535	>81-728-078
4.	Roger Randall	POBOX 637 Doyton (x. 77535 103 page La Huffman TX 77534	
5.	R. M. E. Sue Smart	516 CR140 Liberty 17575	936 336 - 3370
6.			
7.			
8.			
9.			
10.			

#### PUBLIC SIGN-IN SHEET

## PUBLIC SCOPING MEETING – PROPOSED LUCE BAYOU INTERBASIN TRANSFER PROJECT IN LIBERTY AND HARRIS COUNTIES, TEXAS

JULY 21, 2011
DAYTON COMMUNITY CENTER
801 S. CLEVELAND STREET
DAYTON, TEXAS



NO.	NAME (PLEASE PRINT)	ADDRESS	PHONE
1. v	ROBERT DARDEN	SUGAR LAND, TX 77498 14819 HEMLOCK BRIDGE C7 77575 1939 Trinity, Liberty, Tx	832-433-8052
2. /	Carol Skewes	1939 Trinity, Liberty, Tx	PRESS
3.	Robert Scyanolt	n ii	PRESS
4.	Carol Skewes  Robert Scyanolt  Christopher Gareri	Da Ram Engineers, Inc 77081 5420 Dash wood #206, HoustenTX	713-528-1552
5.			
6.			
7.			
8.			
9.			
10.			

#### AGENCY SIGN-IN SHEET

## PUBLIC SCOPING MEETING – PROPOSED LUCE BAYOU INTERBASIN TRANSFER PROJECT IN LIBERTY AND HARRIS COUNTIES, TEXAS

**JULY 21, 2011** 

DAYTON COMMUNITY CENTER 801 S. CLEVELAND STREET

DAYTON, TEXAS



NO.	NAME (PLEASE PRINT)	AGENCY	ADDRESS/PHONE
1.	ROBERT HANISEN	TCEP-AUSTIN	512-239-4583
2.	MIKE MORGAN	TPWD - DICKINSON	281-534-0146
3.			
4.			
5.			
6.			
7.			
8.			
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**Speaker Cards** 





DATE

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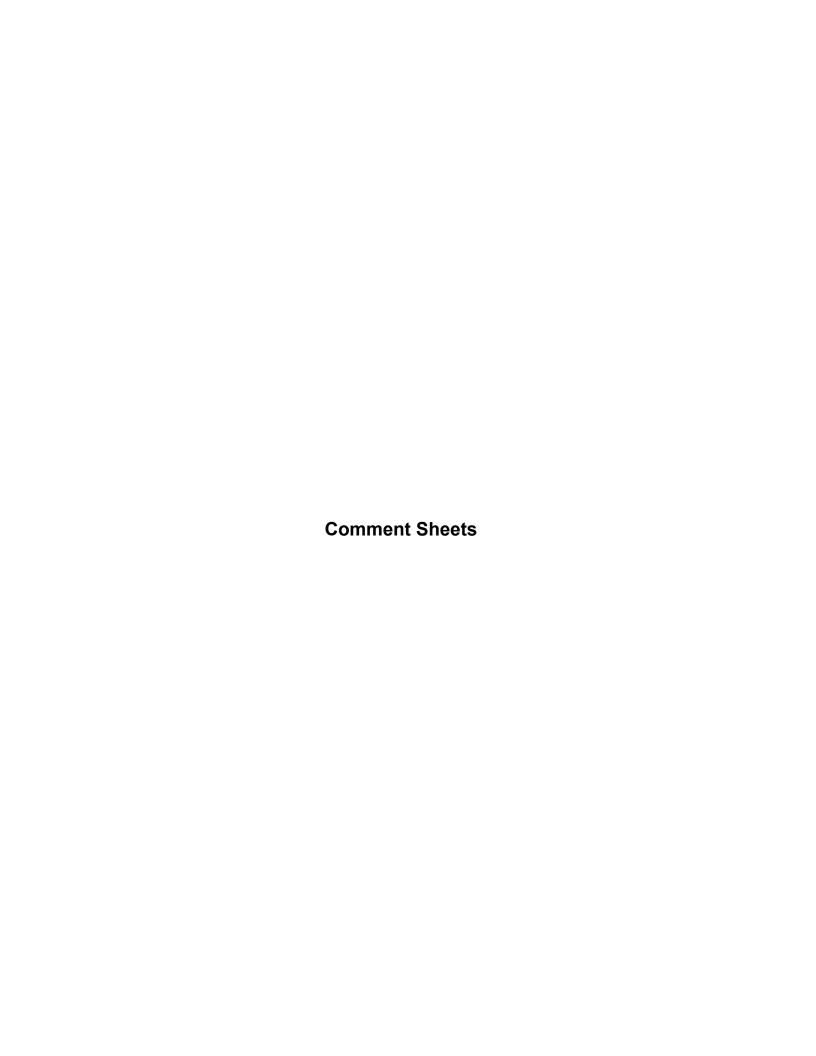


## **Carol Skewes**

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1939 Trinity • P.O. Box 9189 936-336-3611 • Cell 832-477-7314 Liberty, Texas 77575-4829 Print Edition Thursday & Online Dail

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## **Environmental Impact Statement - Luce Bayou Interbasin Transfer Project: Comment Sheet**



Thank you for your interest in the Luce Bayou Interbasin Transfer Project EIS, Harris and Liberty Counties, Texas. Please complete the appropriate sections of this form to provide scoping comments. Written comments can be submitted at the Scoping Meeting, faxed to (409) 766-3931, e-mailed to Jayson.m.hudson@usace.army.mil, or mailed to

Mr. Jayson Hudson, USACE-Regulatory Branch, P.O. Box 1229, Galveston, Texas 77553.

For more Commen of the Dr	ts on the scope and alternatives should be receive	aline, visit http://www.swg.usace.army.mil/reg/eis.asp. red by July 29, 2011, to be considered in defining the scope
	I want to stay informed about the progress of the I prefer electronic communication.	ne project. Please include my name on the mailing list.
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Please wi	rite comments, questions, or concerns below. Co	ontinue on the back or a separate sheet if necessary.
Name:	John Steven Bush	Representing:
	johnstevenbush @ hotmail.com	Phone (optional): 936-334-2009
Street o	r P.O. Box: P.O. Box 896	City/State/Zip: HARDIN TEXAS 44561

## **Environmental Impact Statement - Luce Bayou Interbasin Transfer Project: Comment Sheet**



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## Appendix C 2011 Scoping Meeting Materials

Agenda

**Display Boards** 

Handouts



## **USACE GALVESTON DISTRICT**

## **PUBLIC SCOPING MEETING**

Environmental Impact Statement for Luce Bayou Interbasin Transfer Project Permit Application No.: SWG-2009-00188

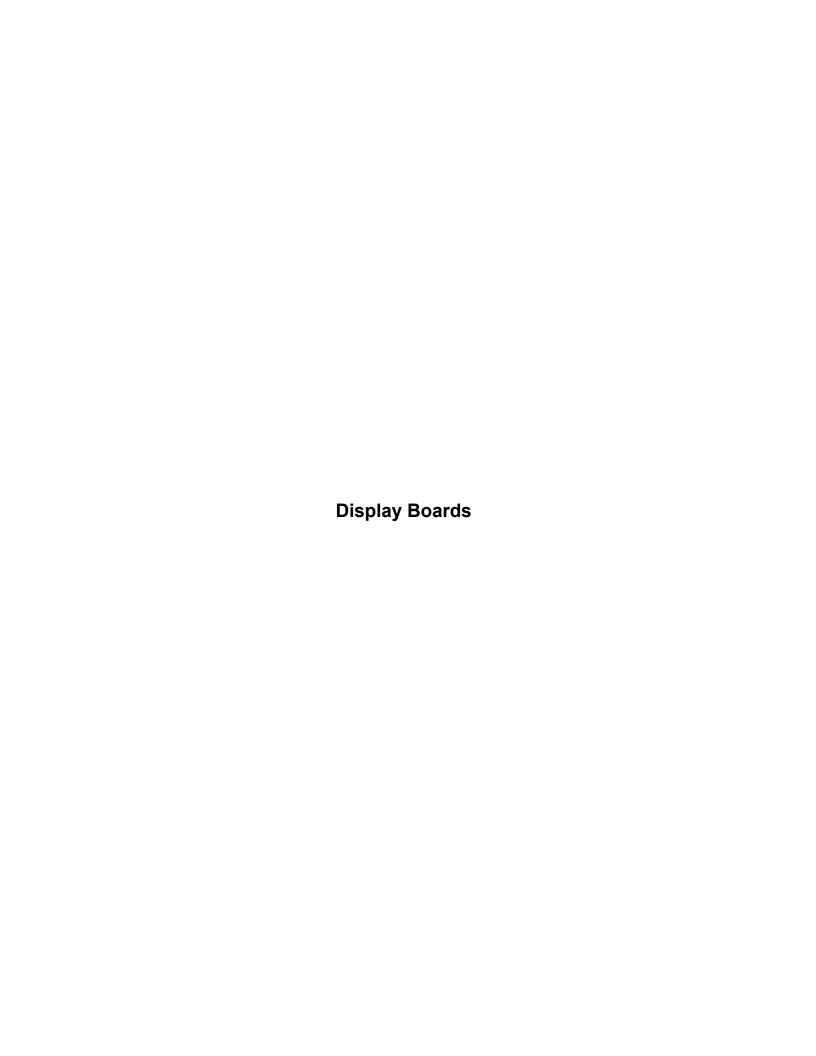
## July 21, 2011

## **AGENDA**

5:30 p.m.	Open House
6:30 p.m.	Welcome/Introductions
6:45 p.m.	Presentation
7:00 p.m.	<b>Public Comment Session</b>
8:00 p.m.	Adjourn



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**U.S. Army Corps of Engineers** 

**Environmental Impact Statement for Luce Bayou Interbasin Transfer Project Permit Application No. SWG-2009-00188** 

Colonel Christopher W. Sallese Commander Galveston District



**US Army Corps of Engineers** ®

Galveston District



## Permit Application No. SWG-2009-00188

### **Proposed Luce Bayou Interbasin Transfer Project**

### **Project Overview**

The Coastal Water Authority is proposing to convey up to 400 million gallons of water per day (MGD) under gravity in accordance with the City of Houston's existing water rights permit from the Trinity River to Lake Houston, a distance of approximately 26.5 miles. The Trinity River water would be conveyed from the proposed pump station through large diameter pipelines to a sediment storage and settling basin and then through an earthen canal to outfall at the Lake Houston discharge point. The canal would have side berms and there would be an access road, drainage ditches, and perimeter fencing surrounding the water conveyance canal. The proposed project consists of the following:

- A new water pumping station will be constructed on the Trinity River at Capers Ridge approximately 10 miles north of Dayton, Texas
- Dual, 108-inch-diameter force mains will be constructed extending from the Capers Ridge pump station approximately 3.5 miles to the west and southwest to outfall to the sedimentation settling basin
- An approximate 20-acre sedimentation settling and storage basin
- An approximate 23.5-mile, clay-lined earthen canal with 4:1 side slopes within a 300-foot easement that would include access roads, berms, chain link perimeter fencing, flow control structures, and metering stations
- Box culverts at canal and roadway crossings and multiple below-ground siphons constructed to facilitate wildlife movement and maintain existing hydrology along the canal conveyance system
- An approximate 10-acre maintenance facility located approximately 6 miles north of Dayton,
   Texas
- Discharge structure along the southeastern shoreline of Lake Houston

The Corps will prepare an Environmental Impact Statement (EIS) to assess the potential impacts associated with the project.

A range of alternatives will be developed, screened, and evaluated in the EIS.

## Permit Application No. SWG-2009-00188

## **Proposed Luce Bayou Interbasin Transfer Project**

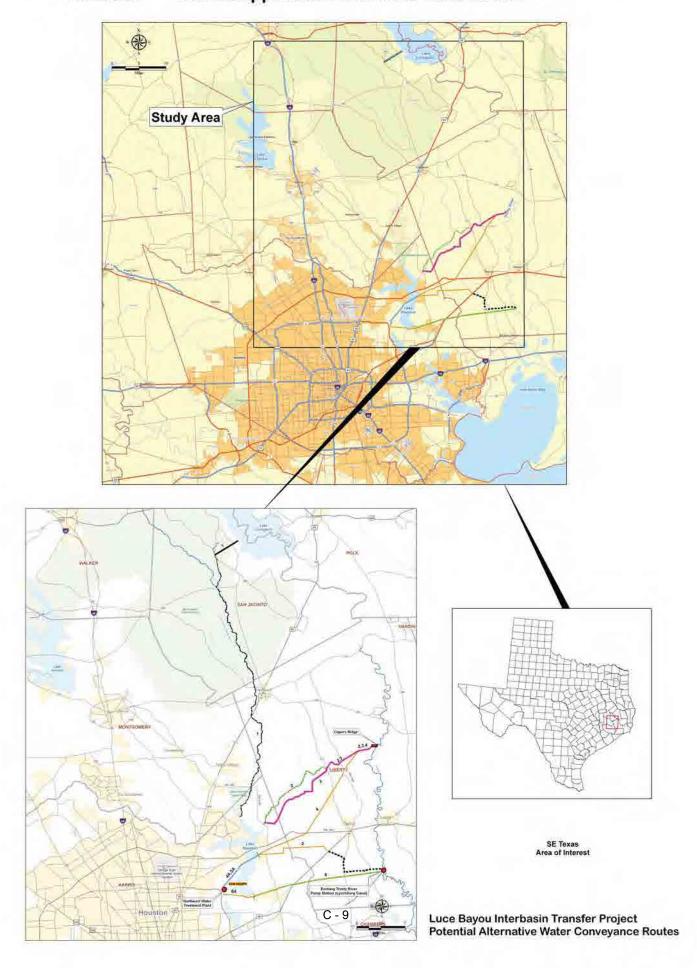
## **Project Purpose and Need**

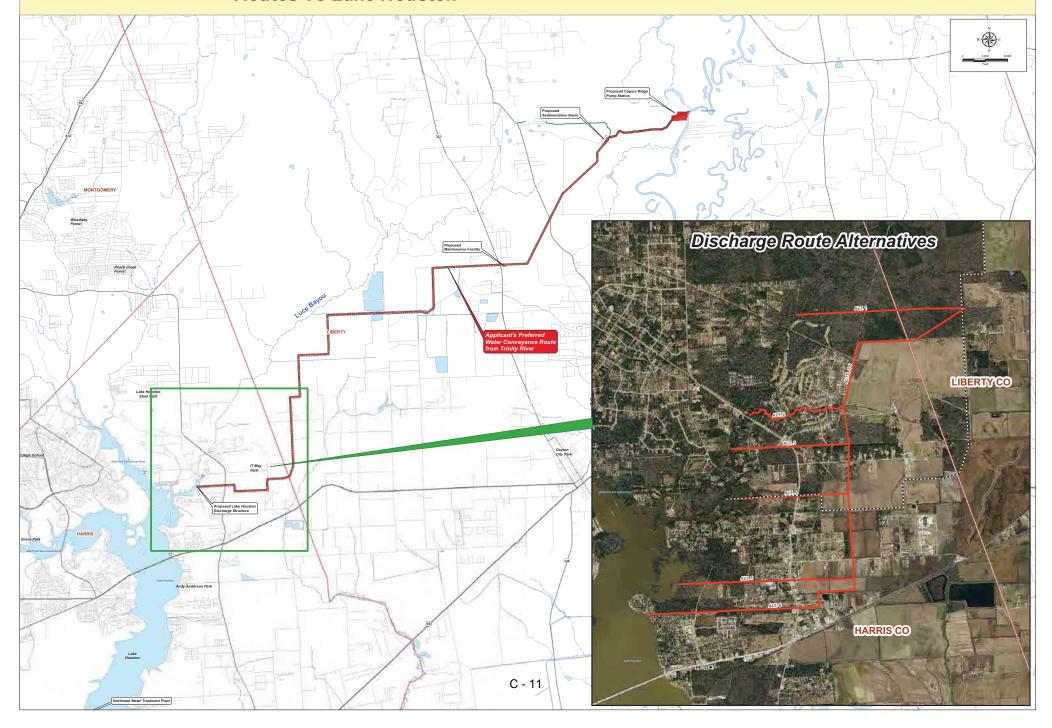
- The basic purpose of the proposed project is to provide drinking water for the City of Houston and surrounding area. The overall purpose is to provide drinking water utilizing water rights previously approved for Trinity River water. The Corps recognizes there is a public and private need for drinking water.
- Specific alternatives including the No Action alternative will be developed and evaluated as part of the NEPA process.
- Alternatives will include the Applicant's Preferred
   Alternative and other reasonable alternatives to the proposed project.

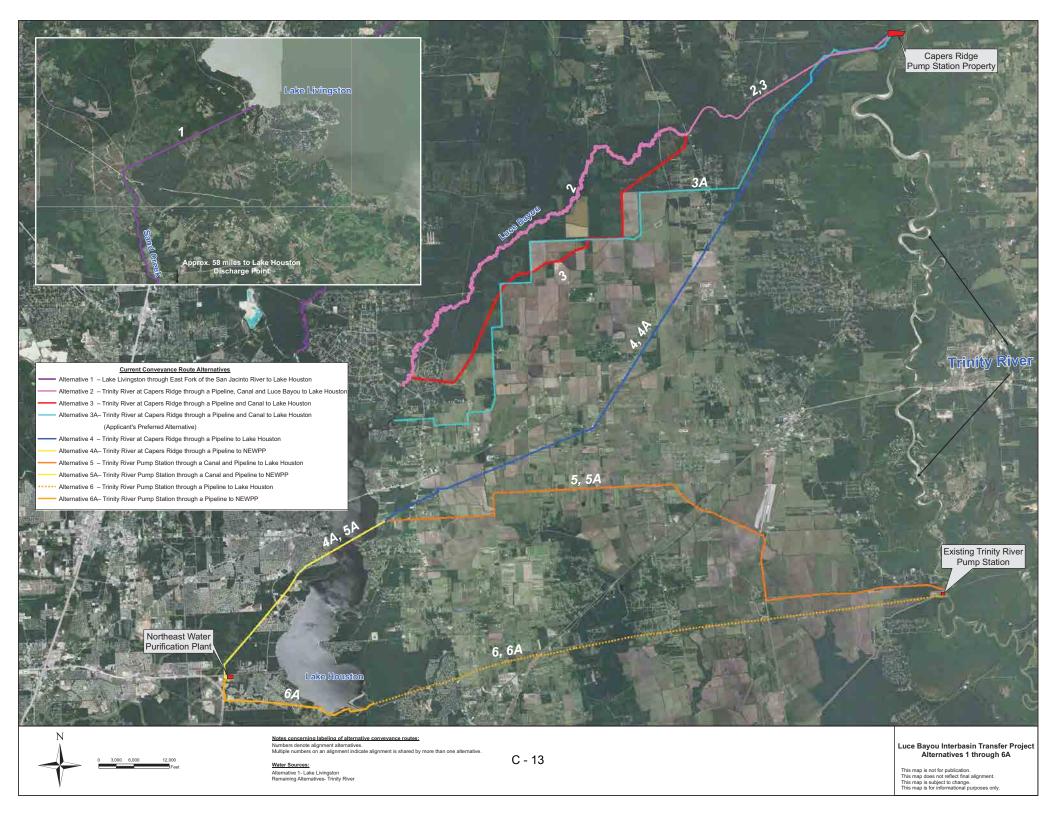
US Army Corps of Engineers ® Galveston District



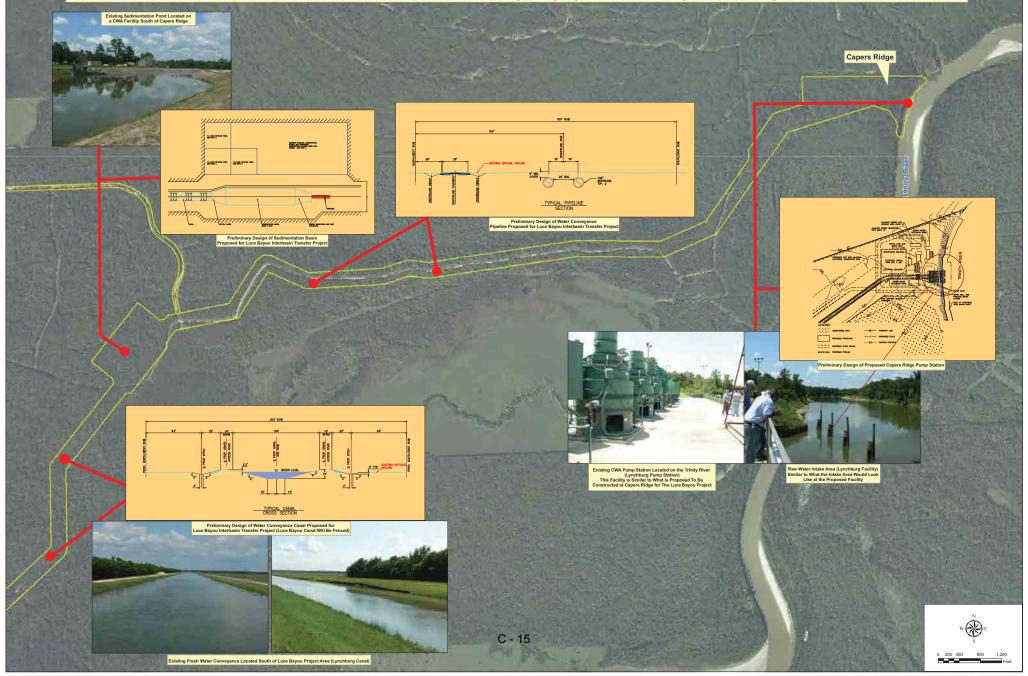
### LUCE BAYOU INTERBASIN TRANSFER PROJECT VICINITY MAP AND CONVEYANCE ALTERNATIVES Permit Application No: SWG-2009-00188







# Luce Bayou Interbasin Transfer Project: Comparison To Existing Coastal Water Authority Facilities Located on Trinity River South of Capers Ridge (Lynchburg Canal)





## Permit Application No. SWG-2009-00188

## **Proposed Luce Bayou Interbasin Transfer Project**

## **Environmental Impact Statement Content**

## Introduction, Purpose and Need, Description, and Evaluation of Alternatives, Affected Environment/Environmental Consequences

Air Quality	Terrestrial Wildlife
Noise	Invasive Species
Physiographic, Topography, and Bathymetry	Aquatic Ecology
Geology and Soils including Erosion & Accretion	Threatened and Endangered Species
Energy and Mineral Resources	Cultural Resources
Ground Water Hydrology	Energy Supply and Natural Resources
Waters of the U.S. including Wetlands	Land Use/Recreation/Aesthetics
Water and Sediment Quality	Socioeconomics including Environmental Justice
Commercial and Recreational Navigation	Traffic including Navigation
Vegetation	Cumulative Effects
Appendices	
Clean Water Act 404(b)(1) Analysis	
Endangered Species Biological Assessment	
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### Permit Application No. SWG-2009-00188

### **Proposed Luce Bayou Interbasin Transfer Project**

### **Potential Environmental Concerns**

## **Include Potential Impacts to:**

- Potential Direct Effects to Waters of the U.S. including Wetlands
- Threatened and Endangered Species
- Aquatic Species Effects
- Invasive Species
- Water Quality
- Erosion and Accretion
- Cumulative Impacts
- Air Quality associated with the proposed project
- Navigation
- Socioeconomic Resources including Environmental Justice
- Human Environmental Effects
- Cultural Resources
- Recreation and Recreational Resources
- Energy Supply and Natural Resources
- Hazardous Waste and Material
- Aesthetics
- Public Health and Safety



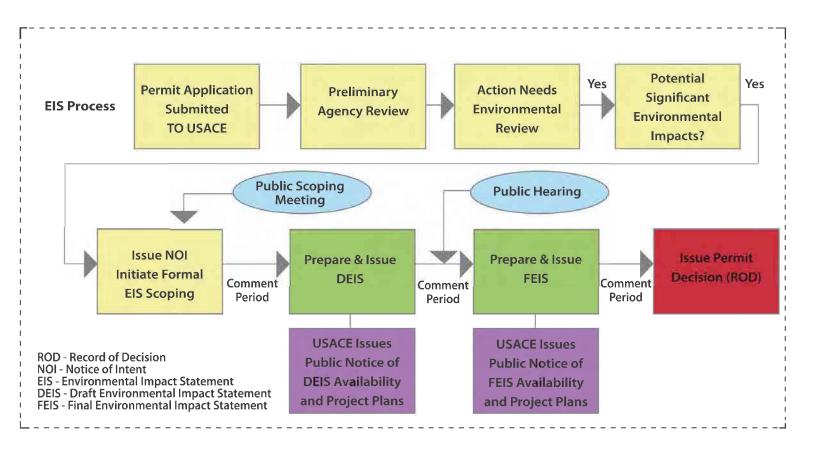
## Proposed Luce Bayou Interbasin Transfer Project

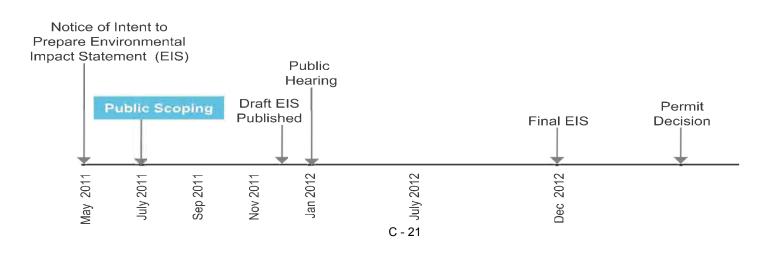
## **National Environmental Policy Act**



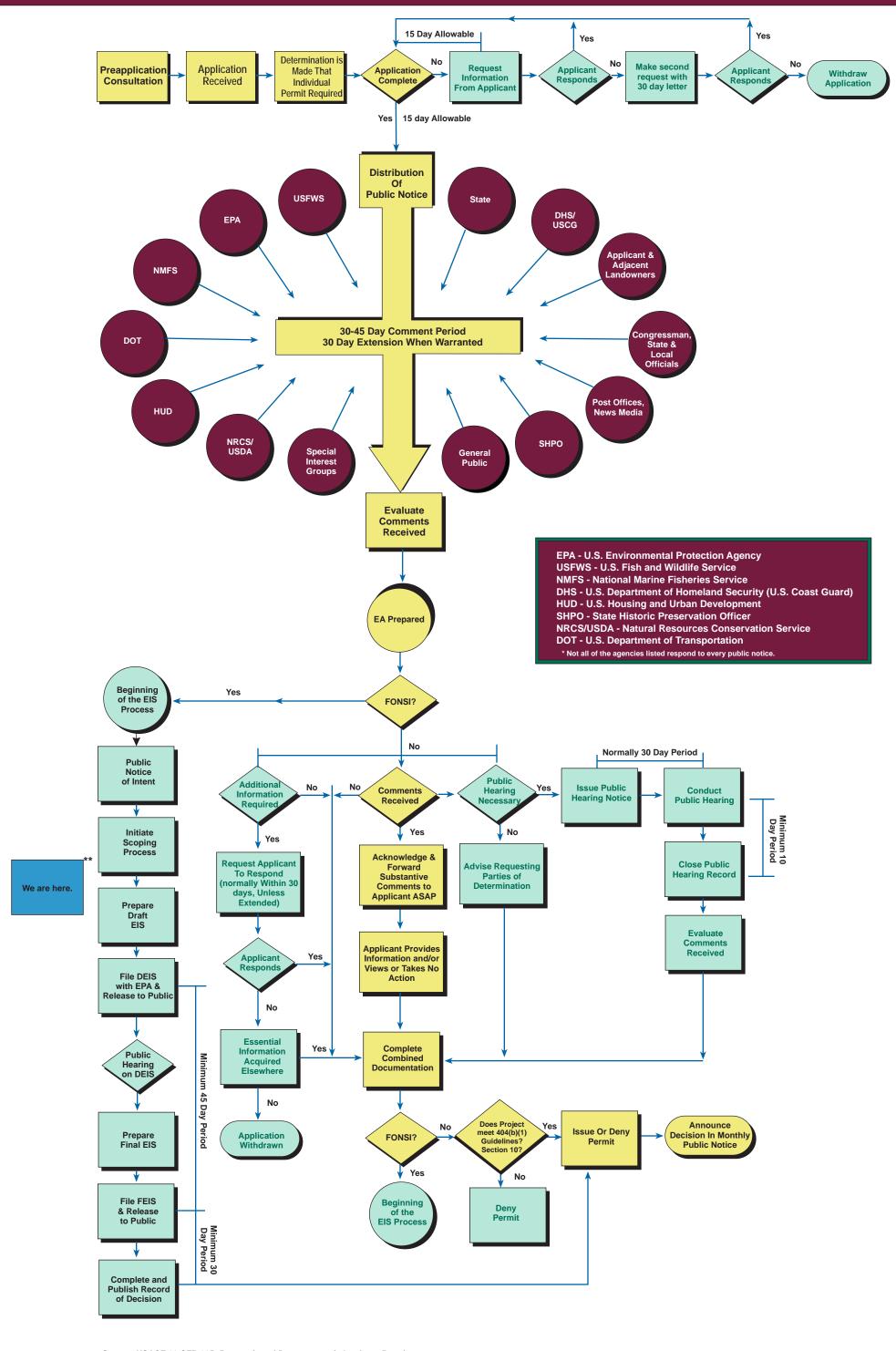
The NEPA Process Provides a Method for:

- Evaluating potential project impacts
- Incorporating public and agency involvement in the Federal decision-making process





## **USACE INDIVIDUAL PERMIT APPLICATION PROCESS**









## **Public Notice**

U.S. Army Corps
Of Engineers
Galveston District

Permit Application No:	SWG-2009-00188
Date Issued:	19 April 2010
Comments Due:	19 May 2010

## U.S. ARMY CORPS OF ENGINEERS, GALVESTON DISTRICT AND TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

**PURPOSE OF PUBLIC NOTICE:** To inform you of a proposal for work in which you might be interested. It is also to solicit your comments and information to better enable us to make a reasonable decision on factors affecting the public interest.

**AUTHORITY:** This application will be eviewed pursuant to Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act.

**APPLICANT:** Coastal Water Authority

One Allen Center

500 Dallas Street, Suite 2800 Houston, Texas 77002-4708

**AGENT:** AECOM

5757 Woodway, Suite 101 West Houston, Texas 77057-1506 Telephone: 713-267-2853 POC: Mr. Donald Ripley, P.E.

**LOCATION:** The project is located starting on the Trinity River approximately six miles east of the intersection of FM 1008 and County Road 2317 in eastern Liberty County with the corridor extending southwestward from the Trinity River to a discharge point near the confluence of Luce Bayou with Lake Houston approximately one mile south of the bridge crossing of FM 2100 and Luce Bayou in Harris County, Texas.

**PROJECT DESCRIPTION:** The proposed project is the conveyance of water from the Trinity River to Lake Houston through an approximate 26.5-mile conveyance structurethat would consist of approximately 3 miles of pipeline (two, 108-inch dameter pipes) and approximately 23.5 miles of a clay-lined earthen canal with berm s, access road, drainage ditches and perim eter fencing. A sedimentation basin and approximate 20-acre sediment storage are proposed where the pipeline transitions to the canal.

Sediment pumped with the TrinityRiver water would be allowed to settle in the sedimentation basin and would be periodically removed so that water entering the canal would contain less sediment. This would thereby reduce the am ount of sedim ent conveyed through the canal and into Lake Houston. Bawl-ground siphons and box culverts are proposed to be constructed where the canal crosses existing roads, easements or utilities and in areas that would require maintenance of existing hydrology that would otherwise be interrupted by the canal and associated structures. Approximately 203.10 acres of jurisdictional aquaticresources were identified within the proposed project footprint, of which approximately 200.95 acres consist of wetlandsand 2.15 acres consist of waters of the United States. Approxim ately 118.93 acres are forested wetlands, 25.55 acres are scrub/shrub, approximately 45.26 acres are emergent wetlands and approximately 11.21 acres are open water associated with wetlands. Of the 2.15 acres of waters of the United States, 0.18 acre is unnamed tributaries, 1.67 acres are the Trinity Ri ver and 0.30 acres are the Lake Houston/Luce Bayou confluence.

After considering avoidance and minimization of adverse impacts to aquatic resources in accordance with the 404(b)(1) guidelines, the applicant has statedthat due to the scale of the proposed project, impacts to all aquatic resources could not be a voided. Therefore, the applicant proposes to compensate for unavoidable impacts by acquiring an approximately 2, 953-acre tract located within the Lower Trinity River Floodplain Habitat Stewardship Program acquisition boundary for the Trinity River National W ildlife Refuge and deeded to the U.S. Fish and W ildlife Service. The proposed mitigation site contains approximately 964 acres of forested wetlands, 6 acres of emergent wetland, 25 acres of scrub/shrub wetlands and an approxim ately 213 acres m issed forested/emergent/scrub/shrub wetland complex.

**NOTES:** This public notice is being issued based on information furnished by the applicant. Further details about the applicant's proposed project, project plans and compensatory mitigation proposal in 44 sheets can be viewed in theientirety on <a href="http://www.swg.usace.army.mil/reg/pn.asp">http://www.swg.usace.army.mil/reg/pn.asp</a>.

A preliminary review of this application indicates that an Environmental Impact Statement (EIS) is not required. Since permit assessment is a continuing process, this preliminary determination of EIS requirement will be changed if data or information brought forth in the coordination process is of a significant nature.

Our evaluation will also follow the guidelines published by the U.S. Environm ental Protection Agency pursuant to Section 404 (b)(1) of the Clean Water Act (CWA).

**OTHER AGENCY AUTHORIZATIONS:** The project site is not located within the Texas Coastal Zone and, therefore, does not require cer tification from the Texas Coastal Managem ent Program.

This project would result in a direct inpact of greater than three acres of waters of the state or 1,500 linear feet of streams (or a combination of the two is above the threshold), and as such would not fulfill Tier I criteria f or the project. Theref ore, Texas Com mission on Environm ental Quality (TCEQ) certification is required. Concurrent with U.S. Arm y Corps of Engineers (Corps) processing of this application, the TCEQ is reviewing this application under Section 401 of the CWA and in accordance with Title 30, Texas Administrative Code Section 279.1-13 to determine if the work would comply with State water quality standards. By virtue of an agreement between the Corps and the TCEQ, this public notice is also issued for the purpose of advising all known interested persons that there is pending before the TCEQ a decision on water quality certification under such act. Any comments concerning this application may be submitted to the Texas Commission on Environmental Quality, 401 Coordinator, MSC-150, P.O.Box 13087, Austin, Texas 78711-3087. The public com ment period extends 30 days from the date of publication of this notice. A copy of the public notice with a description of work is made available for review in the TCEQ's Austin office. The complete application may be reviewed in the Corps ofice listed in this public notice. The TCEQ nay conduct a public meeting to consider all comments concerning water quality if requested in writing. A request fo r a public m eeting m ust contain the following information: the name, mailing address, application number, or other recognizable reference to the application; a brief description of the interest of the requester, or of persons represented by the requester; and a brief description of how the application, if granted, would adversely affect such interest.

**NATIONAL REGISTER OF HISTORIC PLACES:** The staff archaeologist has reviewed the latest published version of the National Register of Historic Places, lists of properties determined eligible, and other sources of information. The following is current knowledge of the presence or absence of historic properties and the effects of the undertaking upon these properties:

A reconnaissance level inventory has resu lted in the identification of cultural resources potentially eligible for inclusion in the national register of historic places as documented in the draft report titled "A Reconnaissance-Level Cultural Resources Survey and Historic Evaluation of the Luce Bayou Interbasin Transfer Project, Harris and Liberty Counties, Texas" dated March 2010 and prepared by Moore Archeological Consulting. The draft report is currently being coordinated with the State Historic Preservation Officer (SHPO) and the Corps. The Corps is consulting with the applicant and the SHPO to determine what additional investigation will be required.

**THREATENED AND ENDANGERED SPECIES:** Threatened and/or endangered species or their critical habitat may be affected by the proposed wok. Consultation with the U.S. Fish and Willife will be initiated to assess the effect on endangered species.

**ESSENTIAL FISH HABITAT:** This notice initiates the Essential Fish Habitat consultation requirements of the Magnuson-Stevens Fishery C onservation and Management Act. Our initial determination is that the proposed action would nothave a substantial adverse impact on Essential Fish Habitat or federally managed fisheries in the Gulfof Mexico. Our final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the National Marine Fisheries Service.

**PUBLIC INTEREST REVIEW FACTORS:** This application will be reviewed in accordance with 33 CFR 320-332, the Regulatory Program of the Corps, and other pertinent laws, regulations and executive orders. The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits, which reasonably m ay be expected to accrue from the proposal, m ust be balanced against its reasonably foreseeable detriments. All factors, which may be relevant to the proposal, will be considered: among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, meral needs and, in general, the needs and welfare of the people.

Solicitation of Comments: The Corps is soliciting comments from the public, Federal, State, and local agencies and officials, Indian tribes and other interested paties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environm ental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Impact Assessm ent and/or an Environmental Impact Statement pursuant to theNational Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

This public notice is being distributed to all known iterested persons in order to assist in developing facts upon which a decision by the Corps m ay be based. For accuracy and com pleteness of the record, all data in support of or in opposition to the proposed work should be submitted in writing setting forth sufficient detail to furnish a cl ear understanding of the reasons for support or opposition.

**PUBLIC HEARING:** Prior to the close of the comment period any person may make a written request for a public hearing setting forth the particular reasons for the request. The District Engineer will determine whether the issues are substantial and should be considered in the permit decision. If a public hearing is warranted, all known interested persons will be notified of the time, date, and location.

CLOSE OF COMMENT PERIOD: All comments pertaining to this Public Notice must reach this office on or before 19 May 2010. Extensions of the comment period may be granted for valid reasons provided a written request is received by the liming date. If no comments are received by that date, it will be considered that there are no objections. Comments and requests for additional information should be submitted to:

Jayson M. Hudson Regulatory Branch, CESWG-PE-RB U.S. Army Corps of Engineers P.O. Box 1229 Galveston, Texas 77553-1229

409-766-3108 Phone 409-766-6301 Fax

DISTRICT ENGINEER GALVESTON DISTRICT CORPS OF ENGINEERS This page intentionally left blank.



and alternatives and to solicit input and feedback from the public on issues to be addressed in the PEIS. Meetings will be announced in local media. The public will also be invited to review and comment on the Draft PEIS when it is released. Comments from the public will be considered before any decision is made regarding implementing the proposed action.

#### Brenda S. Bowen,

Army Federal Register Liaison Officer. [FR Doc. 2011-12914 Filed 5-24-11; 8:45 am] BILLING CODE 3710-08-P

#### DEPARTMENT OF DEFENSE

#### Department of the Army; Corps of Engineers

**Public Scoping Meeting and** Preparation of Environmental Impact Statement for Luce Bayou Interbasin Transfer Project in Liberty County and Harris County, TX

AGENCY: Department of the Army, U.S. Army Corps of Engineers, DoD. ACTION: Notice of intent.

SUMMARY: The U.S. Army Corps of Engineers, Galveston District, has received a permit application for a Department of the Army Permit pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) and Section 404 of the Clean Water Act (33 U.S.C. 1344) from the Coastal Water Authority (SWG-2009-00188) for the proposed Coastal Water Authority's Luce Bayou Interbasin Transfer Project located in eastern Liberty County with the 26.5-mile corridor extending southwestward from the Trinity River to a discharge point near the confluence of Luce Bayou with Lake Houston. The primary Federal involvement associated with the proposed action is the discharge or dredged or fill material into waters of the United States, including jurisdictional wetlands, and the construction of structures that may affect navigable waters. Federal authorizations for the proposed project would constitute a "major federal action." Based on the potential impacts, both individually and cumulatively, the Corps intends to prepare an Environmental Statement (EIS) in compliance with the National Environmental Policy Act to render a final decision on the permit applications.

The Corps' decision will be to either issue, issue with modification or deny Department of the Army permits for the proposed action. The EIS will assess the potential social, economic and

environmental impacts of the construction and operation of the interbasin conveyance, associated facilities, and appurtenances and is intended to be sufficient in scope to address Federal, State and local requirements, environmental issues concerning the proposed action, and permit reviews.

DATES: The scoping period will commence with the publication of this notice. The formal scoping period will end 60 days after the publication of this notice. Comments regarding issues relative to the proposed project should be received.

ADDRESSES: You may submit comments

by any of the following methods: Mail: Jayson M. Hudson, U.S. Army Corps of Engineers, Regulatory Branch, P.O. Box 1229, Galveston, TX 77553-1229; Fax: (409) 766-3931 or E-mail: Jayson.m.hudson@usace.army.mil. Emailed comments, including attachments, should be provided in .doc, .docx, .pdf or .txt formats. Documents pertinent to the proposed project may be examined at http:// www.swg.usace.army.mil/reg/eis.asp. FOR FURTHER INFORMATION CONTACT: Mr. Jayson Hudson, (409) 766-3108. SUPPLEMENTARY INFORMATION: The Galveston District intends to prepare a DEIS on the proposed Luce Bayou

Interbasin Transfer Project which is the proposed transfer of water from the Trinity River in Liberty County to Lake Houston in Harris County, TX. The Coastal Water Authority proposed this project and is the applicant for the Department of the Army permit (DA) SWG-2009-00188.

 Project Background: The Coastal Water Authority is proposing to convey up to 400 million gallons of water per day (MGD) under gravity in accordance with the City of Houston's existing water rights permit from the Trinity River to Lake Houston, a distance of approximately 26.5 miles. The Trinity River water would be conveyed from the proposed pump station through large diameter pipelines to a sediment storage and settling basin and then through an earthen canal to outfall at the Lake Houston discharge point. The canal would have side berms and there would be an access road, drainage ditches, and perimeter fencing surrounding the water conveyance canal. The proposed project consists of the following:

a. A new water pumping station will be constructed on the Trinity River at Capers Ridge approximately 10 miles

north of Dayton, TX.

b. Dual, 108-inch diameter force mains will be constructed extending from the Capers Ridge pump station

approximately 3.5 miles to the west and southwest to outfall to the sedimentation settling basin.

c. An approximate 20-acre sedimentation settling and storage

d. An approximate 23.5 mile claylined earthen canal with 4:1 side slopes within a 300-foot easement that would include access roads, berms, chain link perimeter fencing, flow control structures, and metering stations.

e. Box culverts at canal and roadway crossings and multiple bawl-ground siphons constructed to facilitate wildlife movement and maintain existing hydrology along the canal conveyance

system.

f. An approximate 10-acre maintenance facility located approximately 6 miles north of Dayton,

g. Discharge structure along the southeastern shoreline of Lake Houston.

2. Scoping and Public Involvement Process: A Public Notice was published on April 19, 2010 to initiate the public scoping process for the proposed project. At that time, based on information provided by the Applicant, a preliminary review indicated that an Environmental Impact Statement (EIS) was not required. However, based on continuing permit assessment and information brought forth during the initial coordination process, areas of potential significant impact on the human environment have been identified. Therefore, the EIS process is being implemented so that the permit application can be fully evaluated and a permit decision can be made. All comments received to date, including those provided for review during the initial scoping process, will be considered by the Galveston District during EIS preparation. The purpose of the EIS scoping meeting is to gather information on the subjects to be studied in detail by the EIS. 3. Purpose and Need. The basic

purpose of the proposed action is to provide drinking water for the City of Houston and surrounding area. The overall purpose is to provide drinking water utilizing water rights currently held by the City of Houston in the Trinity River. The Corps recognizes that there is a public and private need for

drinking water.

4. Alternatives. An evaluation of alternatives to the Applicant's preferred alternative initially being considered includes a No Action alternative, alternatives that would avoid, minimize and compensate for impacts to the aquatic environment within the project right-of-way, alternatives that would avoid, minimize and compensate for

impacts to the aquatic environment outside of the right-of-way, alternatives utilizing alternative practices, and other reasonable alternatives that will be developed through the project scoping process which may also meet the identified purpose and need.

- 5. Public Involvement. The purpose of the public scoping process is to determine relevant issues that will influence the scope of the environmental analysis and EIS alternatives. General concerns in the following categories have been identified to date: potential direct effects to waters of the United States including wetlands; water quality; aquatic species; air quality; environmental justice; socioeconomic environment; archaeological and cultural resources; recreation and recreational resources; energy supply and natural resources; hazardous waste and materials; aesthetics; public health and safety; navigation; erosion and accretion; invasive species; cumulative impacts; public benefit and needs of the people along with potential effects on the human environment. All parties who express interest will be given an opportunity to participate in the process.
- 6. Coordination. The proposed action is being coordinated with a number of Federal, State, regional and local agencies including but not limited to the Environmental Protection Agency, the United States (U.S.) Fish and Wildlife Service, U.S. National Marine Fisheries Service, the Texas Commission on Environmental Quality, the Texas General Land Office, and the Texas Parks and Wildlife Department. Other agencies, including the Trinity River National Wildlife Refuge, Texas Water Development Board, and the Texas Department of Transportation, may also comment during the scoping process.
- 7. Availability of the Draft EIS. The Corps currently expects the Draft EIS to be made available to the public by December 2011. A public scoping meeting will be held at the Dayton Community Center in Dayton, Texas. The Corps will announce the public scoping meeting through local news media and the Corps' webpage at http://www.swg.usace.army.mil/reg at least 15 days prior to the first meeting.

#### Brenda S. Bowen,

Army Federal Register Liaison Officer. [FR Doc. 2011–12912 Filed 5–24–11; 8:45 am] BILLING CODE 3720–58–P

#### **DEPARTMENT OF DEFENSE**

Department of the Army; Corps of Engineers

Withdrawal of Notice of Intent To Prepare a Programmatic Environmental Impact Statement for the Chesapeake Bay Oyster Recovery Project, Virginia & Maryland

**AGENCY:** Department of the Army, U.S. Army Corps of Engineers, DoD.

ACTION: Notice of intent; withdrawal.

SUMMARY: The U.S. Army Corps of Engineers (Corps), Baltimore and Norfolk Districts published a notice of intent (NOI) (74 FR 47927) for the Chesapeake Bay Oyster Recovery, MD and VA study on September 18, 2009. That NOI announced that the Corps Baltimore and Norfolk Districts would prepare a single, integrated Native Oyster Restoration Master Plan (master plan) and programmatic environmental impact statement (PEIS) for native oyster recovery in the entire Chesapeake Bay (inclusive of both Maryland and Virginia) and that the document would be tiered to the Programmatic EIS for Oyster Restoration in Chesapeake Bay Including the Use of a Native and/or Nonnative Oyster. In August 2009, the record of decision for Oyster Restoration in Chesapeake Bay including the Use of a Native and/or Non-Native Species was signed. The preferred alternative identified in the 2009 PEIS recommends "using a combination of alternatives that involves only the native Eastern oyster (Crassostrea virginica)." Consistent with the preferred alternative, the Corps will expand upon and further develop plans and recommendations for Chesapeake Bay native oyster restoration in the master plan. However since the master plan will not be identifying site-specific construction areas for restoration and the larger issue of oyster restoration Bay-wide, has been reviewed, a PEIS for the master plan is no longer warranted. Therefore, the Corps is withdrawing its NOI to prepare a PEIS.

FOR FURTHER INFORMATION CONTACT: Ms. Susan Conner, Norfolk District U.S. Army Corps of Engineers, Attn: CENAO-PM-PA, 803 Front Street, Norfolk, VA 23510. E-mail address: Susan.L.Conner@usace.army.mil and phone number: 757-201-7390 or Ms. Anna Compton, Baltimore District, U.S. Army Corps of Engineers, Attn: CENAB-PL-P, P.O, Box 1715, Baltimore, MD 21203. E-mail address: Anna.M.Compton@usace.army.mil and phone number 410-962-4633.

SUPPLEMENTARY INFORMATION:

1. The Baltimore District previously published a NOI (69 FR 68887) for the Chesapeake Bay Oyster Recovery, MD and VA study on November 26, 2004. That NOI indicated that the Baltimore District would prepare a draft EIS for native oyster (Crassostrea virginica) recovery activities within Maryland waters of the Chesapeake Bay. A second NOI (71 FR 14857) was published for the Chesapeake Bay Oyster Recovery, MD and VA study on March 24, 2006. That NOI announced that the Corps Baltimore and Norfolk Districts would prepare a single, integrated master plan and PEIS for native oyster recovery in the entire Chesapeake Bay.

2. A third NOI was published on September 18, 2009 (74 FR 47927) to announce that the timing of the master plan/PEIS was delayed so that the document could be tiered to the Programmatic EIS for Oyster Restoration in Chesapeake Bay Including the Use of a Native and/or Nonnative Oyster. In August 2009 the record of decision for Oyster Restoration in Chesapeake Bay including the Use of a Native and/or Non-Native Species was signed. The preferred alternative identified in the PEIS recommends "using a combination"

of alternatives that involves only the

native Eastern oyster (Crassostrea

virginica)." Consistent with the

preferred alternative, the Corps will expand upon and further develop plans and recommendations for Chesapeake Bay native oyster restoration in the master plan. The master plan will not identify individual, site specific, construction projects. The master plan, instead, will develop a comprehensive approach to oyster restoration and will lay out a road map for a long-term, large-scale restoration of native oysters in the entire Chesapeake Bay. For each area identified for restoration and when Corps appropriations are received, necessary National Environmental Policy Act (NEPA) documents will be prepared to specifically describe the scope, scale, and details of construction of site specific oyster projects. Therefore the Programmatic EIS for Oyster Restoration in Chesapeake Bay Including the Use of a Native and/or Nonnative Oyster prepared in August 2009 is sufficient and appropriate to support the plans laid out in the master plan precluding the need for another PEIS. The master plan will incorporate science, policy, and experience from a number of sources to develop a comprehensive approach to oyster restoration in Maryland and Virginia. All suitable locations and techniques available for native oyster restoration

will be identified and explored, and, if

## Understanding the National Environmental Policy Act



The National Environmental Policy Act (NEPA) is the cornerstone of environmental law in the United States, and it applies to all major federal actions, including permit decisions. Its basic purpose is to ensure that environmental factors receive the same considerations as other factors when federal agencies are making decisions and to include the public in the decision process.

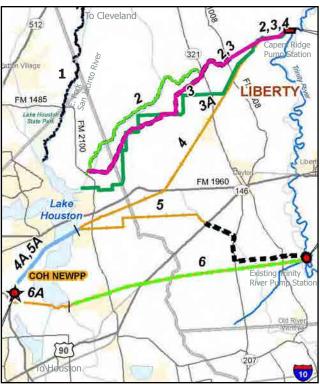
NEPA requires that before federal agencies take a major action, they must publicly disclose the environmental impacts of their proposed action and evaluate alternatives that may have fewer environmental effects.

An Environmental Impact Statement (EIS) is the public document that provides a detailed evaluation of the proposed action and alternatives. Agencies, organizations, and the public may provide input into the preparation of the EIS and comment on the Draft EIS and Final EIS when each is completed.

### How can I get involved?

NEPA makes involvement by the public, agencies, and stakeholders an essential part of ensuring informed decision-making at the federal level. Public involvement through commenting is requested three times during the EIS process:

- 1. Scoping-the stage of identifying the scope of issues and concerns related to the proposed action that the EIS should address, as well as alternative courses of action.
- 2. Draft EIS Review-the stage where the Draft EIS is available for review and comment. The public can provide feedback to the agency about gaps in the information provided or the quality of the analysis in the document, as well as impacts the document may not have addressed or measures needed to mitigate any adverse impacts.
- 3. Final EIS Review-public comments on the final document related to the agency decision.



**Luce Bayou Alternative Alignments** 

NEPA PROCESS

Notice of Intent

**Public and Agency Scoping** 

**Draft EIS** 

Public Hearing/ Comment Period

Final EIS

Notice of Record of Decision

### **How Can I Comment?**

The USACE Galveston District invites comments from all interested parties on the proposed scope and alternatives that the Luce Bayou EIS will consider. Comments must be received by July 29, 2011, to be considered in defining the scope of the Draft EIS. Written comments may be:

- Submitted in person at the Public Scoping Meeting, July 21, 2011
- Faxed to (409) 766-3931
- E-mailed to Jayson.m.hudson@usace.army.mil
- Mailed to: Mr. Jayson Hudson, USACE-Regulatory Branch P.O. Box 1229, Galveston, TX 77553-1229

For more information or to comment online, visit: www.swg.usace.army.mil/reg/eis.asp or call Mr. Jayson Hudson at 409-766-3108.

The public involvement regulations of NEPA also require agencies to notify the public of hearings, meetings, and the availability of environmental documents, and to hold public meetings when appropriate. Participating in the NEPA process is an important way for you to express concerns and raise issues before a decision is made.



## NEWS RELEASE

#### U.S. ARMY CORPS OF ENGINEERS

BUILDING STRONG®

For Immediate Release: July 5, 2011

Media Contact:
Sandra Arnold or Isidro Reyna
(409) 766-3004
<a href="mailto:swgpao@usace.army.mil">swgpao@usace.army.mil</a>
Release No. 071102

## Corps to host public scoping meeting for Coastal Water Authority's Luce Bayou Interbasin Transfer Project

**GALVESTON**, **Texas** (**July 5**, **2011**) – The U. S. Army Corps of Engineers Galveston District received a permit application for a Department of the Army permit (SWG-2009-00188) from the Coastal Water Authority's Luce Bayou Interbasin Transfer Project, for which an Environmental Impact Statement will be prepared. The Corps will host a public scoping meeting July 21, 2011, located in the Dayton Community Center at 801 S. Cleveland St. Dayton, Liberty County, Texas. Doors will open at 5:30 p.m. and the public comment portion of the meeting will begin at 7 p.m.

The proposed Luce Bayou Interbasin Transfer Project includes the following:

- A new water pumping station will be constructed on the Trinity River at Capers Ridge approximately 10 miles north of Dayton, Texas.
- Dual, 108-inch diameter force mains will be constructed extending from the Capers Ridge pump station approximately 3.5 miles to the west and southwest to outfall to the sedimentation settling basin.
- An approximate 20-acre sedimentation settling and storage basin.
- An approximate 23.5 mile clay-lined earthen canal with 4:1 side slopes within a 300- foot easement that would include access roads, berms, chain link perimeter fencing, flow control structures, and metering stations.
- Box culverts at canal and roadway crossings and multiple bawl-ground siphons constructed to facilitate wildlife movement and maintain existing hydrology along the canal conveyance system.
- An approximate 10-acre maintenance facility located approximately six miles north of Dayton, Texas.
- Discharge structure along the southeastern shoreline of Lake Houston.

Staff from the Corps and the Coastal Water Authority will be available to answer questions and speak with the public and interested parties regarding concerns and issues that should be considered as the project is studied, evaluated and designed. An open house featuring displays of the proposed project will also be available for public viewing.

Those who are unable to attend the meeting but wish to submit comments may do so on or before July 29, 2011. Additional information on the project may be found on the Corps' website at <a href="http://www.swg.usace.army.mil/reg/eis.asp">http://www.swg.usace.army.mil/reg/eis.asp</a>. Direct comments to Jayson M. Hudson by electronic mail, jayson.m.hudson@usace.army.mil or by telephone, (409) 766-3108. Written comments may be mailed to: U. S. Army Corps of Engineers Galveston District, Attn: Jayson M. Hudson, P. O. Box 1229, Galveston, Texas 77553-1229.

For more news and information, find us on Facebook, <u>www.facebook.com/GalvestonDistrict</u>, or follow us on Twitter, <u>www.twitter.com/USACEgalveston</u>.

#### ###USACE###

## **Environmental Impact Statement - Luce Bayou Interbasin Transfer Project: Comment Sheet**



Thank you for your interest in the Luce Bayou Interbasin Transfer Project EIS, Harris and Liberty Counties, Texas. Please complete the appropriate sections of this form to provide scoping comments. Written comments can be submitted at the Scoping Meeting, faxed to (409) 766-3931, e-mailed to Jayson.m.hudson@usace.army.mil, or mailed to

Mr. Jayson Hudson, USACE-Regulatory Branch, P.O. Box 1229, Galveston, Texas 77553.

For more information about the project or to comment on Comments on the scope and alternatives should be received the Draft EIS.	line, visit http://www.swg.usace.army.mil/reg/eis.asp. ed by July 29, 2011, to be considered in defining the scope			
I want to stay informed about the progress of th	ne project. Please include my name on the mailing list.			
I prefer electronic communication.				
I prefer paper mailings.				
Please write comments, questions, or concerns below. Co	ontinue on the back or a separate sheet if necessary.			
Name:	Representing:			
E-mail:	Phone (optional):			
Street or P.O. Box:	City/State/Zip:			

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## Appendix D 2011 Scoping Meeting

Photographs of Meeting and Post Event Publicity



U.S. Army Corps of Engineers

Environmental Impact Statement for Luce Bayou Interbasin Transfer Project Permit Application No. SWG-2009-00188

Colonel Christopher W. Sallese Commander Galveston District



Of Engineers ®
Galveston District















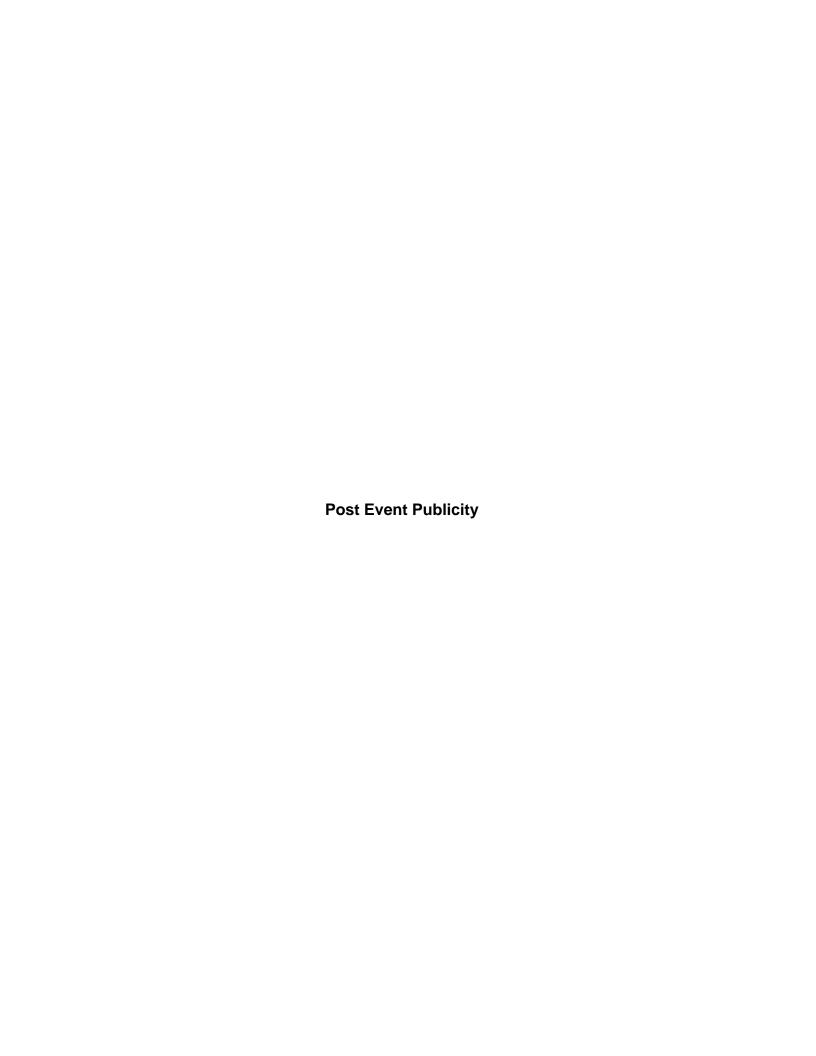












Vol. 124, No. 30, Section A 75 cents thevindicator.com



Good luck Liberty Darlings! (Front row L-R): Bailey Chandler, Jaci Stelly, Kennedy Ev Wakefield, Jamie Peak and Jaylen Prichard. Second Row: Tori Parson, Saige Whitehe

## Lemelle, Abby Phillips, Alexis Belt and Bailey Statum. Coaches: Jacob Fregia, Jonathan **Liberty Darlings**

State Champs off to World Series Sat., July 30 • Pineville, I<mark>.</mark>a.

Out of 14 teams, the Liberty State Champs. These 8-9 year uns. Liberty old girls, coached by JD represent T Darlings, plunged through the

winning bracket of the State Chandler, played a total of tournament hosted here in seven games, scored over 130

vill now go on to as in the World Series this veekend and face South Carrina in the first game South Car

# Commissioners evaluate redistricting plan

July 21, Thomas M. Pollan, Attorney at Law, presented the Liberty County Commissioners Precinct Redistricting Proposal to the public at Liberty Center. Attorney Pollan of Bickerstaff Heath Delgado Acosta, LLP of Austin is the expert retained by Liberty County for redistrict-

Compared to the 2000 redistricting, the map presented showed very few changes. explained, Liberty County's population growth continues to occur in precinct 4, the Dayton-Southwest County area, and thus in order to bal-

ance the population between the four precincts, the geographi-cal size of precinct four continues shrink compared to the Changes in proposed redistricting are as fol-

> See Illustrative Plan detail. Page 16A

> > photos by Carol

Precinct 4: The orthern boundary moves south to the Union Pa from FM1960 at th ific Railroad, a straight line county line to just north of .668 and SH 321. Residents the intersection of C on CR 668 will st in Precinct 4. Precinct 4 ivisions west of FM 1409. will lose two sul are County Roads 400, 402, 411, 412, 414, 4020, 4020B, These subdivision 403, 404, 408, 41 4021A part, 402 private road 402 , 4023, 4041, 4110, 4111, and A. The change in this area does not involve CF 1020 or part of CR 4021A.



Pictured (L-R): Liberty County Judge Craig Mc , Commissioner Norman Brown (Pct. 4) and Thomas M. Pollan examine the detail of le Illustrative Redistricing Plan.

# **FLNB** remodeling Sam Houston property

announced its remodeling its Sam Houston property which is located at the corner of Sam Houston Ave. and Travis

The remodeling consists of complete remake of the interi-or, new roof, new exterior windows and upgrade to the exterior walls.

The building will be divided into three sections. The corner section will be the FLNB Civic Room.
The Bank has had a civic

room since 1970's. The FLNB Civic Room is available to the community for business and educational purposes.

One of its main users is the Life Share Blood Center.

The other two sections will be for office or retail business-

In making the announce-ment, Mr. McGuire, Chairman of the Board, stated "We have owned this building for about five years. We decided to make this investment to serve our downtown community and to continue to support our business expansion.

Mr. McGuire announced



that FLNB has leased one sec tion to All About You. The retail business is owned by Judy and Melissa Joines.

'They have stores in Mont Belvieu and Lumberton. The store specializes in women's and children's apparel, home decor, and gifts. The major lines will be Brighton, Vera Bradley, Waxing Poetic and Miss Me Jeans. McGuire stated "We are excited about All

About You coming to Liberty. "We believe the Joines will add value to our downtown area and to the Liberty com-

First Liberty National Bank

is the oldest and largest locally owned financial institution in Liberty County. FLNB's product list includes

deposit services, loan services, investment products, trust ser-

vices, and insurance products.

The Bank has six locations to serve its customers, Main Street at Sam Houston in Liberty [Liberty Financial Center], 109 East U. S. Hwy 90 in Dayton [Dayton Financial Center], 311 Travis [FLNB Insurance Agency], North Main ATM in Liberty, Hardin ATM and full on-line banking services at www.flnb.

NWS National Hurricane Center Miami, Fla.

As of 4 p.m. EDT Wed., July 27, 2011

### **Iropical Storm Don**

Tropical Storm Don has formed over the southern Gulf of Mexico. At 4 p.m., (July 27) the location was 22.2N, 87.0W, about 120 miles north of Cozumel. Maximum sustained winds 40 mph. Present movement (at press time) is WNW with minimum central pressure at 1001 MB. There are no coastal watches or warnings in effect. Interests in the northwestern Gulf of Mexico should monitor the progress of Don. Watches and/or warnings may be required for portions of the Texas coast through Thurs. Tropical storm force winds extend outward up to 45 mi., mainly to the east of the center.



Thomas M. Pollan, Attorney at Law with Bickerstaff Heath Delgado Acota, I.I.P. explains the Commissioners Redistricting Illustrative Plan to guests of the Community Meeting held Thurs., July 21 at Liberty Center. Once the plan is adopted by commissioners, it will have to be approved by the Department of Justice before going before voters in March. Jamie Hudspeth recorded the meeting

# Luce Bayou project July 29 last day for public comments

July 21 at the Dayton Community Center, the U.S Army Corps of Engineers, Galveston District held their Public Scoping Meeting for Luce Bayou Interbasin Transfer Project.

Comments on the project and its Environmental Impact Statement were received from the few people who attended

Comments can still be addressed to the U.S. Army Corps of Engineers, Galveston District through July 29. Documents pertinent to the proposed project may be examined at http://www.swg. usace.army.mil/reg.

Written comments may be

submitted by mail, fax or Mr. Jayson M. email: Hudson, U.S. Army Corps of Engineers, Regulatory Branch, P.O. Box 1229, Galveston, Texas 77553-1229; Fax: (409) 766-3931; orbyEmail:Jayson.M.Hudson @usace.armv.mil.

Six corridors were identified to convey water from the Trinity River into Lake Houston for the Luce Bayou

Based on criteria, two alternatives were identified as practicable, representing favorable construction cost with fewest environmental impacts.

The preferred alternative included water conveyance from the Trinity River to Lake Houston via a pipeline and a canal along a corridor south of Luce Bayou, eliminating the

natural bayou as a conveyance

alternative to avoid significant environmental impacts that would have occurred from channel reconfiguration.

The final version would look very similar to the existing Coastal Water Authority's Lynchburg Canal that conveys water from the Trinity River to the Lynchburg Reservoir.

The purpose is to provide additional Trinity River water supply into Lake Houston to

meet the growing demand for water in north and west Harris County, the City of Houston, Fort Bend County and Montgomery County for the next fifty years.

The transfer project should be completed by 2020 and it is currently considered a critical component of the 2007 Region H Water Plan for the State of

See Luce, Page 16A

### - Remember to thank a veteran -

# Luce Bayou Project

From Page 1 The Coastal Water Authority was created by Special Act of the Texas Legislature in 1967 with the mission to provide raw water to the City of Houston as well to the City of Houston as well as to serve industry and municipalities in Harris, Chambers, and Liberty County. CWA currently pro-vides raw water to the City of Houston and approximately 100 industrial customers in the region as well as operates and maintains the Lake and maintains the Lake Houston Dam and pump station, and the Trinity Pump Station and the Lynchburg canal system. The Luce Bayou Project

dates back to 1938 when the City of Houston was developing a future water plan. Named for a runaway salve,

Luce Bayou rises eight to ten miles north of Dayton in west central Liberty County, near the Trinity River near the Caper Ridge area. The bayou runs west for twenty-three miles to its mouth on Lake Houston.

It flows through flat to rolling terrain with local escarpments, surfaced by deep, fine sandy loams that supports heavy forests.

In the 1970s, the Luce Bayou Diversion Project was proposed, consisting of an 18,000-footpipeline, a 15,000foot canal, a pumping station, and a 35,000-foot stream con-

vevance facility, designed to transfer water from the Trinity River to Lake Houston.

Archeological excavations found evidence of at least two prehistoric sites along the proposed route, and the plan was

The City of Houston was granted the water rights per-mit for Lake Livingston in 1959, which allows for the total annual diversion of over 940,000 acre-feet or 840 million gallons per day of Trinity River water for use in the San Jacinto River Basin.

The original water rights permit allows for the diversion of Trinity River water from the existing Trinity River Pump Station and/or an additional diversion point referred to as the Capers Ridge Pump

The Luce Bayou Project will utilize the Capers Ridge Pump Station to divert Trinity River water upstream of the existing Trinity River Pump Station to supplement existing supply in Lake Houston and provide raw water to the Northeast Water Purification Plant. While the Capers Ridge Pump Station provides for an additional diversion location and the ability to optimize the existing permitted supply, the total annual diversions from both pump stations will not exceed the original permitted amount of 940,000 acre-feet

Not everyone in attendance

According to the Corp, two land owners spoke against the favored alternative due to land lose, security concerns, drainage, increased mosquito populations, and the lack of water in the Trinity River.

Brandt Mancha, spokes-

man for the Houston Sierra Club, voiced concerns of what changing water flows will do environmentally

According to Mancha and others who are environmental experts, this project will decrease water flow and overflow to the bottomlands, the Trinity River delta and may cause salinity changes at the mouth of the river.

All of these issues have been raised since the 1930s, and have occurred at times when previous dams and changes of river flows have

occurred in the past.
The USACOE intends to have the Final EIS and "Record of Decision" issued by December 31, 2012.

It will respond to public meeting comments and finalizes its EIS scope of services by August/September 2011

In June the project reported on the status of the right of way acquisition. Thirty-three parcels of land have been fully resolved with title acquired, seven parcels in final negotia-tion and with the final twentytwo parcels, offers were being reviewed or negotiated.





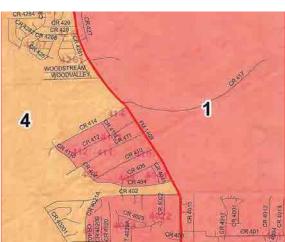






BAKER

MLK



## Appendix E

### **Distribution Lists:**

**Adjacent Property Owners** 

Public, Agency, and Elected Officials

**Churches in Dayton, Liberty, and Hardin Counties** 

**Mail Piece** 



Shirley & Sons Construction Co., Inc.	Herman and Gail Page Floyd	Davis Wirt TR
P. O. Box 429	1233 County Road 2327	P. O. Box 210
Cleveland, TX 77328	Dayton, TX 77535	Livingston, TX 77351
Mr. Randolph Rolke P. O. Box 544 Dayton, TX 77535	Core Value LP c/o Timbervest LLC 3715 Northside Pkwy NW Building 200, Suite 500 Atlanta, GA 30327	Mr. Carl Edwin Aucoin, Jr. 769 Hidden Valley Livingston, TX 77351
Pura Vida Timberlands, LLC 604 Hwy. 80 West Suite P-3 Clinton, MS 39056	Wheat Holdings, Ltd. P. O. Box 10050 Liberty, TX 77575	Ms. Madelyn A. Durdin 10616 Hwy. 321 Dayton, TX 77535
Timothy & Tiffany Gault	Mr. Ronnie Ponder	Fred Jr. & Lisa Majors
10806 Hwy. 321	10677 Hwy. 321	10855 Hwy. 321
Dayton, TX 77535	Dayton, TX 77535	Dayton, TX 77535
Pino Grande Timberlands, LLC	Stilson Properties, Inc.	Riceland Properties, Inc.
604 Hwy. 80 West	17 Hillcrest Dr.	P. O. Box 259
Clinton, MS 39056	Dayton, TX 77535	Mer Rouge, LA 71261
Enstor Houston HUB Storage 20333 State Hwy. 249 Suite 400 Houston, TX 77070-2613	Carolyn Johnson Epple 12675 Via Colmenar San Diego, CA 92129	Kari L. Quinn Reidland Trust 2528 FM 686 Dayton, TX 77535
Ms. Ena Stoesser 32 Little John Ln. Dayton, TX 77535	Stoesser Farms, Inc. Attn. Mr. Mark Stoesser P.O. Box 637 Dayton, TX 77535	Guthrie F E Etal 2528 FM 686 Dayton, TX 77535
HF Houston Green Land, LP 16380 Addison Rd. Addison, TX 75001	E L & F V Bender Estate Attn: Mr. Jack Leeka 6363 Woodway Dr., Suite 965 Houston, TX 77057	J.T. Timberlands, LLC 2619 Sledding Hill Road Oakton, VA 22124
Mr. Ned Holmes, Trustee	Richard & Sylvia Bumstead	Cedarwood Properties
55 Waugh Dr., Suite 1111	2435 Wolf Road	6200 De La Guerra Terrace
Houston, TX 77007	Huffman, TX 77336	Bakersfield, CA 93306
Roy A. Seaberg, Sr., et al	Walter E. & Lauren McGinnis	Ms. Robin April May
P. O. Box 15919	20201 Monday Hargrove Rd.	2310 Swift Blvd.
Austin, TX 78761	New Caney, TX 77357-7239	Houston, TX 77030-1117

Cooper Value III 3836 Amherst St. Houston, TX 77005-2830	Ms. Rosetta Scott Venables 1533 Waverly St. Houston, TX 77008-4150	Texas Land Fund No. 6, LP 3200 Southwest Freeway Suite 3000 Houston, TX 77027-7567
E. C. Gilbreath	Woodlands Shores Partners	Mr. Roger D. Kennedy
P. O. Box 8508	2113 Lubbock St.	472 County Road 2340
Houston, TX 77249-8508	Houston, TX 77007-7623	Dayton, TX 77535
Mr. Cody L. Whitton, Sr.	Hallis W. & Denise V. Arsement	Ms. Anne J. Stephens
442 County Road 2340	360 County Road 2340	166 County Road 2340
Dayton, TX 77535	Dayton, TX 77535	Dayton, TX 77535
Randall Leon & Amy Jo Davis	Mr. Barney E. Bracewell	Jackie Felton Baker
226 County Road 2340	282 County Road 2340	296 County Road 2340
Dayton, TX 77535	Dayton, TX 77535	Dayton, TX 77535
Mr. Albert George	Amos & Ora Jean Collins	Oscar & Patricia Ann Beechem
266 County Road 6881 S.	519 County Road 688	18519 Hot Creek Ct.
Dayton, TX 77535	Dayton, TX 77535	Humble, TX 77346
Louis & Damaris Yarbrough	Mr. Richard Heileman	Ms. Mabel Irna Gradney
P. O. Box 2474	10202 Cheeves Dr.	217 County Road 688
Baytown, TX 77522	Houston, TX 77016	Dayton, TX 77535
Juan & Maria Montalvo Mendez	Ms. Regina Bell	Mr. Joel Scott Zak
1901 Gillette Street	109 County Road 688	221 County Road 6881 S.
Baytown, TX 77520	Dayton, TX 77535	Dayton, TX 77535
Mr. Joseph C. Ressler c/o Ressler Fredericka S. 3108 Memphis Ave. Nederland, TX 77627	Ms. Pamela L. Wickes 972 County Road 6243 Dayton, TX 77535	Mr. Bobby Gene Rawlinson 210 County Road 6245 Dayton, TX 77535
Mr. Kenneth Ray Morrison	Mr. Joe A. Knight	Richard & Kathryn Fletcher
603 Golden Bear	P. O. Box 232	2601 South Broadway, #59
Kingwood, TX 77339	Dayton, TX 77535	La Porte, TX 77571
Mr. Louis P. Wojcik	Mr. Allen Lott	Mr. Joseph B. Dumas
22515 Coral Chase Court	474 County Road 6244	714 Tuely Ct.
Katy, TX 77494	Dayton, TX 77535	Houston, TX 77049

Aubrey C. & Linda Scott 26250 Scott Rd. Huffman, TX 77336-3847 Mr. Joseph Dumas P. O. Box 1405 Huffman, TX 77336-1405 John & Stacie Bolender P. O. Box 1003 Huffman, TX 77336-1003

Ms. Madeline M. Grice 25740 Willy Ln. Huffman, TX 77336-4112 McGinty, Inc. P. O. Box 1330 Huffman, TX 77336-1330 Reagan W. & Lori A. Diver 25750 Willy Ln. Huffman, TX 77336-4112

Clifton A. III & Wendy Oestriecher 101 N. Locksley Dr. Lafayette, LA 70508-4811 Timothy J. & Kimberly Kuta 4006 Wells Mark Dr. Humble, TX 77396-4016 Estate of Mrs. Opal Downey Attn: Mr. Doyle Lynn Martin 16711 Glenshannon Dr. Houston, TX 77059-5503

F. L. Matheny, Jr. 14284 Pursley Ln. Alvin, TX 77511-0270 Albert J. & Christine A. Thomas 2217 Iron Ore Dr. Huffman, TX 77336-4107

Freddie Sue Jones P. O. Box 167 Como, TX 75431-0167

Mr. Billy J. Chauncey 3503 Shore Shadows Dr. Crosby, TX 77532-7221 Ms. Suzanne Pockrus 5321 Barouche St. Plano, TX 75023-5645 This page intentionally left blank.



The Honorable John Cornyn	United States Senate	517 Hart Senate Office Bldg.	Washington, DC 20510		
The Honorable John Cornyn	United States Senate	5300 Memorial Drive # 980	Houston, TX 77007		
The Honorable Kay Bailey Hutchison	United States Senate	1919 Smith Street, Suite 800	Houston, Tx 77002		
			Washington, DC 20510-		
The Honorable Kay Bailey Hutchison	United States Senate	284 Russell Senate Office Building	4304		
Congressman Ted Poe	2 <sup>nd</sup> District of Texas)	430 Cannon Building	Washington, D.C. 20515		
Congressman Ted Poe	2 <sup>nd</sup> District of Texas)	1801 Kingwood Drive, Suite 240	Kingwood, Texas 77339		
Congressman Kevin Brady	(8 <sup>th</sup> District of Texas)	1202 Sam Houston Avenue, Suite 8			
Congressman Kevin Brady	(8 <sup>th</sup> District of Texas)	301 Cannon Building	Washington, DC 20516		
Congress Polyh Holl	(4th District of Toylog)	2405 0 1 1100	Washington, DC 20515-		
Congressman Ralph Hall	(4 <sup>th</sup> District of Texas)	2405 Rayburn HOB	4304		
Congressman Sam Johnson	1211 Longworth Building	Washington, D.C. 20515			
Congressman Sam Johnson	(4 <sup>th</sup> District of Texas)	2929 N. Central Expy, Ste 240			
Congressman Louie Gohmert	2440 Rayburn House Office Building	Washington, D.C. 20515-4301			
Congressman Louie Gohmert	1121 ESE Loop 323, Ste 206	Tyler, TX, 75701			
Office of the Governor	Attn: Governor Rick Perry	P.O. Box 12428	Austin, Texas 78711-2548		
Office of the Attorney General	Attn: Greg Abbott	P.O. Box 12548	Austin, Texas 78711-2548 The Woodlands, Texas		
Senator Tommy Williams – District 4		P. O. Box 8069	77387-8069		
State Representative John Otto –	18 <sup>th</sup> District	P. O. Box 965	Dayton, Texas 77535		
State Representative Dan Huberty	– 127 <sup>th</sup> District	4501 Magnolia Cove Dr. #201	Kingwood, Texas 77345		
Federal Emergency Management Agency	Flood Hazard Mapping	Attn: Gary Zimmerer, Civil Engineer	(Mapping Team Lead)	FRC 800 North Loop 288	Denton, Texas 76209-3698
Mr. Donald R. Fairley	Regional Environmental Officer	FEMA Region 6	FRC 800 North Loop 288	Denton, Texas 76209-3698	
	National Oceanic and Atmospheric		Gulf of Mexico Branch,		
United States Department of Commerce	Administration	Attn: Rusty Swafford, Supervisor	NMFS SE Office	4700 Avenue U	Galveston, TX 77551-5997
U.S. Department of Commerce, NOAA	Office of Ocean and Coastal Resource Management	NOAA Ocean Service	Attn: Donna Wieting, Acting Director	1305 East West Highway 19241 David Memorial	Silver Spring, MD 20910
U.S. Geological Survey	Texas South Central Area	Gulf Coast Program Office	Attn: Mike Turco, Chief	Drive, # 180	Conroe, TX 77385
		Texas AgriLife Blackland Research			
U.S. Environmental Protection Agency	Attn: Jim Herrington	and Extension Center	720 East Blackland Road	Temple, Texas 76502	
United States Environmental Protection Against	Danian C	Atta: Charan Fanay Dawish	1445 Ross Avenue, Suite	Dellas Tayas 75000 0700	
United States Environmental Protection Agency	Region 6	Attn: Sharon Fancy Parrish	1200	Dallas, Texas 75202-2733	
U.S. Department of Agriculture	Natural Resources Conservation Service	Attn: Brooks Turner	FSA Offices	1351A Highway 146 Bypass	Liberty, Texas 77575
O.S. Department of Agriculture	INALUIAI INESOUICES CONSEIVALION SEIVICE	Atti. Brooke Turrier	1 3A Offices	Буразз	Liberty, Texas 11313
Liberty-Hardin-Chambers County USDA FSA	Attn: Executive Director Levi Morris	2720 North Main Street	Liberty, Texas 77575-3909	Dallas, Texas 75202-2733 17629 El Camino Real	
United States Department of the Interior	Fish and Wildlife Service	Division of Ecological Services	Attn: Stephen D. Parris	#211	Houston, Texas 77058-3051
United States Fish and Wildlife Service	Arlington, Texas Ecological Services Field Office	Attn: John Morse	Fish and Wildlife Biologist	711 Stadium Drive, Suite 252	Arlington, Texas 76011
	Fisheries & Aquatic Resource	Aquatic Invasive Species		711 Stadium Drive, Suite	
United States Fish & Wildlife Service	Conservation	Coordinator	David Britton	252	Arlington, Texas 76011
U.S. Fish & Wildlife Service	Trinity River National Wildlife Refuge	Attn: Stuart Marcus	P.O. Box 10015	Liberty, Texas 77575	
U.S. Fish & Wildlife Service	Attn: Moni Belton	17629 El Camino Real, Suite 211	Houston, Texas 77058		
U.S. Fish & Wildlife Service	Attn: Catherine Yeargan	17629 El Camino Real, Suite 211	Houston, Texas 77058		
US Army Corps of Engineers - Ft Worth District	Brian Phelps	Operations Project Manager	819 Taylor Street	Fort Worth, TX 76102	
US Army Corps of Engineers - Tulsa District	Everett Laney, Biologist	SWD Invasive Species	1645 S. 101st E. Ave.	Tulsa, OK 74128	
US Army Corps of Engineers - Tulsa District	Mark Ellison, Red River Area Operations	Project Manager	1645 S. 101st E. Ave.	Tulsa, OK 74128	

	T	T			I
Texas Water Development Board	Attn: Chris Caran	1700 North Congress Avenue	P.O. Box 13231	Austin, Texas 78711-3231	
Texas Department of Transportation	Liberty County Office	Attn: Cory Taylor	209 Layl Drive	Liberty, Texas 77575	
Texas Department of Transportation	Attn: Myron Broussard	Liberty County Office	209 Layl Drive	Liberty, Texas 77575	
Texas Department of Transportation	Beaumont District	Attn: Duane Browning, PE,	Interim District Engineer	8350 Eastext Freeway	Beaumont, Texas 77708-1701
Texas Parks & Wildlife Department	Attn: Colonel Peter Flores, Director	4200 Smith School Road	Austin, Texas 78744-3291		
Texas Parks & Wildlife Department	Attn: Rebecca Hensley	4200 Smith School Road	Austin, Texas 78744-3291		
Texas Parks & Wildlife Department	Attn: Ross Melinchuk	Deputy Executive Director, Natural Resources	4200 Smith School Road	Austin, TX 78744	
Texas Parks & Wildlife Department	Attn: Dave Terre	Chief of Management and Research	4200 Smith School Road	Austin, TX 78744	
Texas Parks & Wildlife Department	Attn: Mr. William "Jamie" Schubert	Resource Protection Division	1502 FM 517 Road East	Dickinson, Texas 77539	
Texas Parks & Wildlife Foundation	Chief Financial Officer	Eloise Laird	1901 North Akard Street	Dallas, TX 75201-2305	
Texas Parks & Wildlife Department	Attn: Mr. Brian Van Zee	Inland Fisheries Regional Director	1601 E. Crest Dr.	Waco, Texas 76705	
Texas Historical Commission	Attn: Mark Denton	P.O. Box 12276	Austin, Texas 78711-2276		
Texas Historical Commission	Attn: F. Lawrence Oaks, SHPO	P.O. Box 12276	Austin, Texas 78711-2276		
Texas Commission on Environmental Quality	Attn.: Mr. Charles Maguire	Water Quality Division Director, MC 145	P.O. Box 13087	Austin, Texas 78711-3087	
	Attn.: Ms. Kelly Keel, Water Quality				
Texas Commission on Environmental Quality	Planning	Division Director, MC 109	P.O. Box 13087	Austin, Texas 78711-3087	
Texas Commission on Environmental Quality	Attn.: Ms. L'Oreal Stepney, Office of Water	Deputy Director, MC 158	P.O. Box 13087		
Texas Commission on Environmental Quality	Attn.: Ms. Linda Brookins	Water Supply Division Director, MC 154	P.O. Box 13087	Austin, Texas 78711-3087	
Texas Commission on Environmental Quality	Attn: Robert Hansen, Mail Code 150	P.O. Box 13087	Austin, Texas 78711-3087		
Texas Soil and Water Conservation Board	Attn: Rex Isom	Executive Director	4311 South 31 <sup>st</sup> , Suite 125	Temple, Texas 76502	
Public Utilities Commission of Texas	Attn: Executive Director	1701 North Congress Avenue, 7 <sup>th</sup> Floor	Austin, Texas 78711-3326		
General Land Office	Coastal Coordination Council	Attn: Thomas Calnan	1700 North Congress Ave.	Austin, TX 78701-1495	
Harris County Flood Control District	Attn: Rod Cardosa	9900 Northwest Freeway	Houston, Texas 77092		
Harris County Flood Control District	Attn: Myron Harris	9900 Northwest Freeway	Houston, Texas 77092		
Liberty County Courthouse	Attn: Donna G. Brown, County Clerk	1923 Sam Houston #115	Liberty, Texas 77575		
Liberty County Tax Assessor-Collector	Attn: Mark B. McClelland	1923 Sam Houston Parkway	Liberty, Texas 77575		
Liberty County Economic Development HCPID, Division of Architecture and	Corporation, Foreign-Trade Zone 171	Attn: John Hebert	P.O. Box 857	Liberty, TX 77575	
Engineering	Attn: John R. Blount, P.E., Director	1001 Preston, 7 <sup>th</sup> FI.	Houston, Texas 77002		
Fort Bend County	The Honorable Robert E. Hebert	301 Jackson	Richmond, Texas 77469		
Liberty County Judge	The Honorable Chap Cain	1923 Sam Houston, Suite 223	Liberty, Texas 77575		
Liberty County Judge	The Honorable Mark Morefield	1923 Sam Houston, Suite 304	Liberty, Texas 77575		
Liberty County Judge	The Honorable Craig McNair	1923 Sam Houston, Suite C	Liberty, Texas 77575		
Liberty County Judge	The Honorable Thomas Chambers	1923 Sam Houston, Suite 222	Liberty, Texas 77575		
Liberty County Commissioner Precinct 1	The Honorable Todd Fontenot	3197 FM 160 North	Liberty, Texas 77575		
Liberty County Commissioner Precinct 2	The Honorable Charlotte Key Warner	P.O. Box 77	Hardin, Texas 77561		
Liberty County Commissioner Precinct 3	The Honorable Melvin Hunt	119 S. Fenner	Cleveland, Texas 77327		
Liberty County Commissioner Precinct 4	The Honorable Norman Brown	P.O. Box 88	Dayton, Texas 77535		
Councilman Frosty Pruitt	1509 Prater	Dayton, Tx 77535	Bayton, Toxas 11000		
Councilman Frosty Fruitt  Councilman Jay Knight	P.O. Box 1118	Dayton, Tx 77535  Dayton, Tx 77535			
Councilman Jay Kriight Councilman Richard Brown		-			
	103 Mockingbird Lane	Dayton, Tx 77535			
Councilman William Gay	P.O. Box 8	Dayton, Tx 77535			

County Attorney	Attn: Wesley Hinch	P.O. Box 91278	Liberty, Tx 77575		
County Auditor	Attn.: Harold Seay	1923 Sam Houston Room 117	Liberty, TX 77575		
County Clerk	Paulettte Williams	P.O. Box 369	Liberty, TX 77575		
District Attorney	Mike Little	P.O. Box 4008	Liberty, Tx 77575		
Liberty County Judge	The Honorable Phil Fitzgerald	1923 Sam Houston	Liberty, Texas 77575		
Liberty County Judge Liberty County, Emergency Management	The Honorable Filli Fitzgerald	2400 Beaumont Ave., Jail Admin.	Liberty, Texas 77575		
Services	Attn: Tommy Branch	Bldg.	Liberty, Texas 77575		
Liberty County Engineering	Attn: Louis W. Bergman III, Engineer	2103 Cos Street	Liberty, Texas 77575		
Liberty Soundy Engineering	Attn: Billy Brown, Director of	2100 000 00000	Liberty, Texas Trees		
Liberty County	Maintenance	1923 Sam Houston	Liberty, Texas 77575		
Councilman Greg Hayman	P.O. Box 963	Dayton, TX 77535			
Mr. Hugh Damek	4694 FM 1960	Dayton, TX 77535			
Eliza Guidry	Pro-Tem City Council	P.O. Box 133	Dayton, TX 77535		
Liberty County	Attn: Barbara Burwick, Permit Clerk	2103 Cos Street	Liberty, Texas 77575		
J. P. Barry Graves	P.O. Box 141	Dayton, TX 77535			
J.P. Bobgby Rader	2103 Cos St.	Liberty, Tx 77575			
Liberty County	Attn: Kim Harris, Treasurer	1923 Sam Houston, Rm. 102	Liberty, Texas 77575		
Ms. Barbara Zaruba	Councilwoman, City of Dayton	1501 North Main	Dayton, TX 77535		
Mr. Calvin Carter	602 E. Young St.	Dayton, TX 77535			
	3. 5	.,,	Friendswood, Texas 77546	-	
Harris-Galveston Subsidence District	Attn: Ron Neighbors	1660 West Bay Area Blvd.	2640		
Houston-Galveston Area Council	Attn: Alan C. Clark	3555 Timmons Lane, Suite 120	Houston, Texas 77027		
			Richmond, Texas 77469-		
Fort Bend County Subsidence District	Attn: Wanda Sebesta	P. O. Box 427	0427		
City of Liberty	Attn: Mayor Carl Pickett	1829 Sam Houston	Liberty, Texas 77575		
City of Liberty	Attn: Gary Broz, City Manager	1829 Sam Houston	Liberty, Texas 77575		
City of Liberty	Naomi Harrington, Director	Economic Development	1829 Sam Houston Ave.	Liberty, Texas 77575	
Liberty-Dayton Chamber of Commerce	Attn: Alan D. Conner, Chairman	1801 Trinity Street	Liberty, Texas 77575		
North Liberty County	Volunteer Fire Department	Hwy 787 Romayor	Liberty, TX 77575		
Crosby-Huffman Chamber of Commerce	14900 FM 2100	P.O. Box 452	Crosby, Texas 77532		
Dayton Chamber of Commerce	Attn: Elizabeth Ellis	801 S. Cleveland Street	Dayton, Texas 77535		
Town of Dayton Lakes	P.O. Box 1476	Dayton, TX 77535-1476			
City of Devers	City Manager	200 Highway 90 W	Devers, TX 77538		
City of Hardin	Mayor	P.O. Box 324	Hardin, TX 77561		
City of Huffman	Emergency Service District 4	24139 FM Road 2100	Huffman, TX 77336		
Town of Hull	City Official	7404 FM 834 E.	Hull, Texas 77564		
Town of Hull	Fresh Water Supply District	P.O. Box 282	Hull, TX 77564		
City of Kenefick	Mayor, City Hall	3564 FM 1008	Kenefick, TX 77535		
City of Tarkington	Special Utility District	19396 Hwy 321	Tarkington, Tx 77327		
City of Tarkington	Community Library	30932 FM 163	Tarkington, Tx 77327		
City of Dayton Lakes	Attn: Mayor	186 Nueces Drive	Dayton, Texas 775335		
Hardin City Hall	142 County Road 2010	Liberty, Texas 77575			
City of Dayton	Attn: Mayor Felix Skarpa	1975 E. Clayton	Dayton, Texas 77535		
City of Ames	Attn: Mayor	304 Martin Street	Ames, Texas 77575		
City of Daisetta	Attn: Lynn Wells, Mayor	222 E Plum Street	Daisetta, Texas 77533		
Deep East Texas Council of Governments	Walter Diggles, Executive Director	210 Premier Dr.	Jasper, TX 75951		
East Texas Council of Governments	David Cleveland, Executive Director	3800 Stone Road	Kilgore, TX 75662		
Mr. Bruce R. Bodson	4426 Lakeshore Forest Drive	Missouri City, Texas 77459			
Mr. Carell T Freeman	19815 Atascocita Pines Drive	Humble, Texas 77346-2111			
Fairway Crossing at Lake Houston	Homeowners Association (HOA)	% CKM Property Management Inc.	PO Box 160	Tomball, Tx 77377	
Lakewood Heights Homeowners Association	c/o Cam 7702 FM 1960 E., #302	Humble, TX 77346			

Dayton Independent School District	Attn: Superintendent Michael Kuhrt	100 Cherry Creek Road	Dayton, Texas 77535		
Dayton Independent School District	Attn: Thomas and Jacqueline Payne	206 Tram Road	Dayton, Texas 77535		
Dayton Independent School Board	Attn: Linda Harris	27 Sherwood Lane	Dayton, TX 77535		
Huffman Independent School District	Attn: Ms. Shirley Hitt	25400 Willy Lane	Huffman, Texas 77336		
Hull Daisetta Independent School District	Andrew McCreight, Board President	P.O. Box 477	Daisetta, Texas 77533		
Hull Daisetta Independent School District	Superintendent	P.O. Box 477	Daisetta, TX 77533		
Mr. Richard C. Bumstead	2345 Wolf Road	Huffman, Texas 77336-3737			
	Attn: Liberty County, Texas Area				
Union Pacific Railroad	Representative	1400 Douglas Street	Omaha, NE 68179		
	Attn: Liberty County, Texas Area	-	Fort Worth, Texas 76131-		
BNSF Railway Company	Representative	2650 Lou Menk Drive	2830		
L	Attn: Liberty County, Texas Area	D 0 D 040005	Kansas City, MO 64121-		
Kansas City Southern Railroad	Representative	P.O. Box 219335	9335		
The Kansas City Southern Railway Company	1610 Woodstead Court	The Woodlands, Texas 77380			
Robert Bruner	166 West Ridge Dr.	Huntsville, Texas 77340			
	, , ,	Univ. of Houston, Clear Lake			
Dr. George Guillen, Executive Director	Environmental Institute of Houston	Campus	2700 Bay Area Boulevard	Houston, Texas 77058	
Dr. Jonathan Phillips	Tobacco Road Research Team	Department of Geography	University of Kentucky	Lexington, KY 40506-0027	
Robert McFarlane, PhD	McFarlane & Associates, Inc.	2604 Mason St	Houston, Texas 77006- 3116		
Robert Michanane, PhD	Wichariane & Associates, Inc.	2604 Mason St.	Baytown, Texas 77522-		
ExxonMobil-Baytown	Attn: Glynna Leiper	P.O. Box 4004	4004		
Marvin Marcell	7623 Tiburon Trail	Sugar Land, Texas 77479			
Southwest Water Supply Corporation	Attn: William Teer	2763 FM 977 West	Leona, Texas 75850		
Codinivest video cupply corporation	Attri. William Teer	2700 1 W 377 West	Arlington, Texas 76004-		
Trinity River Authority	Attn: Danny Vance	P.O. Box 60	0060		
	,	Planning and Environmental			
Trinity River Authority	Mr. Glenn Coienpeel, PE, Sr. Manager	Management	6300 South Collins	Arlington, TX 76018	
Trinity River Authority	Mr. Bill Holder	Lake Livingston Project Manager	P.O. Box 360	Livingston, TX 77351	
San Jacinto River Authority	Mr. Ron Kelling, PE	Deputy General Manager	2436 Sawdust Road	The Woodlands, TX 77380	
San Jacinto River Authority	Lake Conroe Division Manager	Blake Kellum	P.O. Box 329	Conroe, Texas 77305	
San Jacinto River Authority	Water Quality Department Manager	Attn: Randy Acreman	P.O. Box 329	Conroe, Texas 77305	
Can bacine raver ratherty	Water Quality Department Wariager	7 tan randy Adreman	1 .O. BOX 020	Combe, Texas Trees	
West Harris County Water Supply Corporation	Attn: C. Harold Wallace	318 Vanderpool	Houston, Texas 77024		
Pudge Willcox	PO Box 1089	Anahuac, Texas 77514			
		, -		Houston, Texas 77002-	
Coastal Water Authority	Mr. Wayne Klotz, PE, Board Chairman	One Allen Center, Suite 2800	500 Dallas Street	4708	
				Houston, Texas 77002-	
Coastal Water Authority	Mr. Gary Oradat, Executive Director	One Allen Center, Suite 2800	500 Dallas Street	4708	
City of Houston	Department of Public Works &	Attn: Jun Chang, PE, D.WRE,	D.O. Day 4500	Heusten Teure 77054	
City of Houston	Engineering	Deputy Director	P.O. Box 1562	Houston, Texas 77251	
North Harris County Regional Water Authority	Jimmie Schindewolf, General Manager	North Harris County Regional Water Authority	110 west, Suite	Houston, Texas 77068	
Trong Trains County Regional Water Authority	ommine definite won, deficial ivialiage	North Harris County Regional Water		TIOUSION, TEXAS TTUUD	
Showri Nandagiri, P.E.	Engineering Coordinator	Authority	110	Houston, Texas 77068	
West Harris County Regional Water Authority	Attn: Wayne Ahrens, PE	Dannenbaum Engineering Corp.	3100 West Alabama	Houston, TX 77098	
, 3: : :::	-,	3 22 3 227		,	
Central Harris County Regional Water Authority	Attn: Paul Wallick, PE	1300 Post Oak Blvd, Suite 1400	Houston, Texas 77056		
			Houston, Texas 77040-		
Mr. Paul Wallick, PE	Pate Engineers	13333 Northwest Freeway	6016		
North Fort Dond Water Authority	Atta: Malinda Cilira DE	Drown 9 Cov Fasings - Is-	10777 Westheimer, Suite	Houston Toyer 77040	
North Fort Bend Water Authority	Attn: Melinda Silva, PE	Brown & Gay Engineers, Inc.	400	Houston, Texas 77042	

Keystone Gulf Coast Expansion Project	T	T	<u> </u>		1
(Keystone XL)	2700 Post Oak Blvd., Suite 400	Houston, Texas 77056			
ENSTOR Houston HUB Storage	Attn: Rick Weninger	25959 Westheimer Parkway	Katy, Texas 77494-5366		
Wallisville Lake Project	U.S. Army Corps of Engineers	P.O. Box 293	Wallisville, Texas 77597		
Trinity River Authority	Southern Region Office	1601 Normal Park	Huntsville, Texas 77340		
Sam Houston Electrical Cooperative	District 1 - Polk, Angelina and Trinity Counties	Livingston Headquarters	1157 East Church Street	P.O. Box 1121	Livingston, Texas 77351
The Liberty County Transit Plan	Mr. Marco Bracamontes, Manager, Public Outreach	Transportation Public Information	Houston-Galveston Area Council	P.O. Box 22777	Houston, TX 77227-2777
Kinder Morgan Energy Partners LLC	Re: Dayton Natural Gas Storage Facility	500 Dallas Street, Suite 1000	Houston, Texas 77002		
Grand Parkway Association	Mr. David Gornet, PE	Executive Director	4544 Post Oak Place #222	Houston, TX 77027	
Coastal Water Authority	Trinity River Pump Station	4819 FM 1409	Liberty, TX 77575		
		Attn.: Jack Steele, Executive		Houston, Texas 77227-	
Houston-Galveston Area Council	Gulf Coast State Planning Region (16)	Director	P.O. Box 22777	2777	
Liberty County Appraisal District	Attn: Alan Conner, Chief Appraiser	2030 Sam Houston Street	Liberty, TX 77575		
Harris County Appraisal District	Mr. Jim Robinson	13013 Northwest Freeway	Houston, Texas 77040- 6305		
North Houston Association	Attn: Paula Lenz, Executive Director	16825 Northchase Drive, Suite 160	Houston, TX 77060		
The Galveston Bay Foundation	Attn: Scott A. Jones	17330 State Highway 3	Webster, Texas 77598		
Sierra Club, Houston Regional Group	Attn: Brandt Mannchen	5431 Carew	Houston, Texas 77096		
Houston Wilderness	Attn: Victoria Herrin	4916 Main St., Suite 230	Houston, Texas 77002		
Lake Houston State Park	22031 Baptist Encampment Road	New Caney, Texas 77357	,		
	·				
Structuring Environmental Alternatives (SEA)	P.O. Box 53526	Houston, Texas 77052			
Coastal Conservation Association	6919 Portwest Dr Ste 100	Houston, Texas 77024			
Houston Audubon Society	Ms. Gina Donovan, Executive Director	440 Wilchester	Houston, Texas 77079		
Natural Legacy	P.O. Box 541125	Houston, Texas 77254			
Endangered Species Media Project	Mr. Frank Salzhandler, Director	1813 Missouri St	Houston, Texas 77006		
Houston Wilderness, Inc.	P.O. Box 66413	Houston, Texas 77226			
Produced Water Society	P.O. Box 590102	Houston, Texas 77259			
Bayou Land Conservancy	Attn: Jennifer Lorenz, Executive Director	10330 Lake Road, Building J	Houston, Texas 77070		
Park Lake Property Owners Association	15995 North Barkers Landing, Suite 16	c/o PCMI	Houston, Texas 77079		
Ducks Unlimited	Attn: Houston Chapter	1 Waterfowl Way	Memphis, TN 38120 5120 Woodway, Suite	Houston, Texas 77036	
Citizens League for Environmental Action Now	Attn: Mr. Geoffrey Castro	Executive Director	9004 Regional Development	Houston, Texas 77056 1113 Vine Street, Suite	
The Trust for Public Land	Houston-Galveston Field Office	Attn: Meg Naumann, Associate	Director The Woodlands, Texas	117	Houston, Texas 77002
Houston Advanced Research Center	Attn: Robert Harris, President and CEO	800 Research Forest Drive	77381		
Galveston Bay Keeper	P.O. Box 71	Seabrook, Texas 77586			
Environmental Defense Fund	Attn: Elena Craft	44 East Avenue	Austin, Texas 78701		
Citizens' Environmental Coalition	Attn: Katie Molina	6420 Richmond Avenue, Suite 658	Houston, Texas 77057		
Lower Trinity Valley Bird Club	P.O. Box 6051	Liberty, Texas 77575			
Sam Houston Regional Library & Research Center	650 FM 1011	Liberty, Texas 77575			
Austin Memorial Library	220 S Bonham Ave	Cleveland, Texas 77327			
Liberty Municipal Library	1710 Sam Houston Ave	Liberty, Texas 77575			
Jones Public Library	307 W. Houston Street	Dayton, Texas 77535			
Atascocita Branch Library	19520 Pinehurst Trails Drive	Humble, Texas 77346			
Crosby Branch Library	135 Hare Road	Crosby, Texas 77532			
Kingwood Branch Library	4102 Rustic Woods Dr	Kingwood, Texas 77345			
Angwood Dianon Library	4 TOZ KUSLIC WOOUS DI	ringwood, Texas // 545			

Robert Tullis Library	21130 US Hwy 59 #K	New Caney		T	
Mr. Randolph Rolke	P. O. Box 544	-			
Shirley & Sons Construction Co., Inc.	P. O. Box 344	Dayton, TX 77535 Cleveland, TX 77328			
Pura Vida Timberlands, LLC		Suite P-3	Clinton, MS 39056		
•	604 Hwy. 80 West	Suite P-3	Clinton, MS 39056		
Adjacent property owners follow	40000 H 204	Davidson TV 77505			
Timothy & Tiffany Gault	10806 Hwy. 321	Dayton, TX 77535			
Pino Grande Timberlands, LLC	604 Hwy. 80 West	Clinton, MS 39056			
Enstor Houston HUB Storage	20333 State Hwy. 249	Suite 400	Houston, TX 77070-2613		
Ms. Ena Stoesser	32 Little John Ln.	Dayton, TX 77535			
HF Houston Green Land, LP	16380 Addison Rd.	Addison, TX 75001			
Mr. Ned Holmes, Trustee	55 Waugh Dr., Suite 1111	Houston, TX 77007			
Roy A. Seaberg, Sr., et al	P. O. Box 15919	Austin, TX 78761			
Herman and Gail Page Floyd	1233 County Road 2327	Dayton, TX 77535			
Core Value LP	c/o Timbervest LLC	3715 Northside Pkwy NW	Building 200, Suite 500	Atlanta, GA 30327	
Wheat Holdings, Ltd.	P. O. Box 10050	Liberty, TX 77575			
Mr. Ronnie Ponder	10677 Hwy. 321	Dayton, TX 77535			
Stilson Properties, Inc.	17 Hillcrest Dr.	Dayton, TX 77535			
Carolyn Johnson Epple	12675 Via Colmenar	San Diego, CA 92129			
Stoesser Farms, Inc.	Attn. Mr. Mark Stoesser	P.O. Box 637	Dayton, TX 77535		
E L & F V Bender Estate	Attn: Mr. Jack Leeka	6363 Woodway Dr., Suite 965	Houston, TX 77057		
Richard & Sylvia Bumstead	2435 Wolf Road	Huffman, TX 77336			
Walter E. & Lauren McGinnis	20201 Monday Hargrove Rd.	New Caney, TX 77357-7239			
Davis Wirt TR	P. O. Box 210	Livingston, TX 77351			
Mr. Carl Edwin Aucoin, Jr.	769 Hidden Valley	Livingston, TX 77351			
Ms. Madelyn A. Durdin	10616 Hwy. 321	Dayton, TX 77535			
Fred Jr. & Lisa Majors	10855 Hwy. 321	Dayton, TX 77535			
Riceland Properties, Inc.	P. O. Box 259	Mer Rouge, LA 71261			
Kari L. Quinn Reidland Trust	2528 FM 686	Dayton, TX 77535			
Guthrie F E Et.al.	2528 FM 686	Dayton, TX 77535			
J.T. Timberlands, LLC	2619 Sledding Hill Road	Oakton, VA 22124			
Cedarwood Properties	6200 De La Guerra Terrace	Bakersfield, CA 93306			
Ms. Robin April May	2310 Swift Blvd.	Houston, TX 77030-1117			
Cooper Value III	3836 Amherst St.	Houston, TX 77005-2830			
E. C. Gilbreath	P. O. Box 8508	Houston, TX 77249-8508			
Juan & Maria Montalvo Mendez	1901 Gillette Street	Baytown, TX 77520			
Louis & Damaris Yarbrough	P. O. Box 2474	Baytown, TX 77520			
Mr. Albert George	266 County Road 6881 S.	Dayton, TX 77535			
Randall Leon & Amy Jo Davis	226 County Road 2340	Dayton, TX 77535			
	c/o Ressler Fredericka S.		Nederland, TX 77627		
Mr. Joseph C. Ressler	603 Golden Bear	3108 Memphis Ave.	INCUCIIAIIU, IA 1/021		
Mr. Kenneth Ray Morrison		Kingwood, TX 77339			
Mr. Louis P. Wojcik	22515 Coral Chase Court	Katy, TX 77494			
Cooper Value III	3836 Amherst St.	Houston, TX 77005-2830			
E. C. Gilbreath	P. O. Box 8508	Houston, TX 77249-8508			
Randall Leon & Amy Jo Davis	226 County Road 2340	Dayton, TX 77535			
Mr. Cody L. Whitton, Sr.	442 County Road 2340	Dayton, TX 77535			
Mr. Albert George	266 County Road 6881 S.	Dayton, TX 77535			
Louis & Damaris Yarbrough	P. O. Box 2474	Baytown, TX 77522			
Juan & Maria Montalvo Mendez	1901 Gillette Street	Baytown, TX 77520			
Mr. Joseph C. Ressler	c/o Ressler Fredericka S.	3108 Memphis Ave.	Nederland, TX 77627		
Mr. Kenneth Ray Morrison	603 Golden Bear	Kingwood, TX 77339			
Mr. Louis P. Wojcik	22515 Coral Chase Court	Katy, TX 77494			
Ms. Rosetta Scott Venables	1533 Waverly St.	Houston, TX 77008-4150			

Woodlands Shores Partners	2113 Lubbock St.	Houston, TX 77007-7623	
Hallis W. & Denise V. Arsement	360 County Road 2340	Dayton, TX 77535	
Amos & Ora Jean Collins	519 County Road 688	Dayton, TX 77535	
Mr. Barney E. Bracewell	282 County Road 2340	Dayton, TX 77535	
Amos & Ora Jean Collins	519 County Road 688	Dayton, TX 77535	
Ms. Regina Bell	109 County Road 688	Dayton, TX 77535	
Ms. Pamela L. Wickes	972 County Road 6243	Dayton, TX 77535	
Mr. Joe A. Knight	P. O. Box 232	Dayton, TX 77535	
Mr. Allen Lott	474 County Road 6244	Dayton, TX 77535	
Mr. Richard Heileman	10202 Cheeves Dr.	Houston, TX 77016	
Texas Land Fund No. 6, LP	3200 Southwest Freeway #3000	Houston, TX 77027-7567	
Mr. Roger D. Kennedy	472 County Road 2340	Dayton, TX 77535	
Ms. Anne J. Stephens	166 County Road 2340	Dayton, TX 77535	
Jackie Felton Baker	296 County Road 2340	Dayton, TX 77535	
Oscar & Patricia Ann Beechem	18519 Hot Creek Ct.	Humble, TX 77346	
Ms. Mabel Irna Gradney	217 County Road 688	Dayton, TX 77535	
Mr. Joel Scott Zak	221 County Road 6881 S.	Dayton, TX 77535	
Mr. Bobby Gene Rawlinson	210 County Road 6245	Dayton, TX 77535	
Richard & Kathryn Fletcher	2601 South Broadway, #59	La Porte, TX 77571	
Mr. Joseph B. Dumas	714 Tuely Ct.	Houston, TX 77049	
Aubrey C. & Linda Scott	26250 Scott Rd.	Huffman, TX 77336-3847	
Ms. Madeline M. Grice	25740 Willy Ln.	Huffman, TX 77336-4112	
Clifton A. III & Wendy Oestriecher	101 N. Locksley Dr.	Lafayette, LA 70508-4811	
F. L. Matheny, Jr.	14284 Pursley Ln.	Alvin, TX 77511-0270	
Mr. Billy J. Chauncey	3503 Shore Shadows Dr.	Crosby, TX 77532-7221	
Mr. Joseph Dumas	P. O. Box 1405	Huffman, TX 77336-1405	
McGinty, Inc.	P. O. Box 1330	Huffman, TX 77336-1330	
Timothy J. & Kimberly Kuta	4006 Wells Mark Dr.	Humble, TX 77396-4016	
Albert J. & Christine A. Thomas	2217 Iron Ore Dr.	Huffman, TX 77336-4107	
Ms. Suzanne Pockrus	5321 Barouche St.	Plano, TX 75023-5645	
John & Stacie Bolender	P. O. Box 1003	Huffman, TX 77336-1003	
Reagan W. & Lori A. Diver	25750 Willy Ln.	Huffman, TX 77336-4112	
Estate of Mrs. Opal Downey	Attn: Mr. Doyle Lynn Martin	16711 Glenshannon Dr.	Houston, TX 77059-5503
Freddie Sue Jones	P. O. Box 167	Como, TX 75431-0167	

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Church Of Christ 1st Assembly of God Parsonage **Dayton Cowboy Church** 2718 Webster St. 3201 N. Main St. 310 N. Church St. Liberty, TX 77575 Liberty, TX 77575 Dayton, TX 77535 Berean Tabernacle Baptist Church Church of Christ Eagle Heights Fellowship 405 Highway 146 N 708 N. Church St. 14120 Highway 146 Liberty, TX 77575 Dayton, TX 77535 Davton, TX 77535 Bethel Assembly Of God Church Church of Jesus Christ of LDS Eastgate Church 1707 County Road 611 4606 FM 563 Rd. 331 Vera Ln. Liberty, TX 77575 Liberty, TX 77575 Dayton, TX 77535 Bible Way Pentecostal Church **Churchnew Bethel Missionary Eminence Baptist Church** 7971 Highway 146 N 1702 FM 160 Rd. N 810 Martin L. King St. S Liberty, TX 77575 Liberty, TX 77575 Liberty, TX 77575 Calvary Baptist Chapel Community Christian Church First Assembly of God 2217 Huffman Eastgate Rd. 5445 FM 1409 2512 Grand Ave. Huffman, TX 77336 Dayton, TX 77535 Liberty, TX 77575 Calvary Baptist Church Cornerstone Church First Assembly of God Church 15 County Road 129 2829 FM 1960 1693 Highway 146 Byp, Liberty, TX 77575 Liberty, TX 77575 Dayton, TX 77535 Calvary Baptist Church Covenant House Family Worship Center First Baptist Church 4031 FM 1960 434 Main St. 602 Main St. Dayton, TX 77535 Liberty, TX 77575 Liberty, TX 77575 Central Baptist Church Crosby Church Afob First Baptist Church of Dayton 3630 E. Highway 90 30673 Huffman Cleveland Rd. 202 E. Houston St. Dayton, TX 77535 Liberty, TX 77575 Huffman, TX 77336 Changing Lifestyles Fellowship Church Cypress Point Baptist Church First Baptist Church of Devers 4011 Highway 321 21 Blue Lake Dr. 106 Avenue A Huffman, TX 77336 Liberty, TX 77575 Dayton, TX 77535 First Baptist Church-Huffman Church of Christ **Dayton Christian Center** 25503 FM 2100 Rd. 3890 N. Cleveland St. 1420 Columbia St. Huffman, TX 77336 Liberty, TX 77575 Dayton, TX 77535

First Pentecostal Church-God	Grace Community Baptist Church	Lake Houston United Mthdst Chr
1330 Old Atascocita Rd.	8073 FM 1960	23606 FM 2100 Rd.
Huffman, TX 77336	Dayton, TX 77535	Huffman, TX 77336
First Presbyterian Church	Greater Faith Apostolic Church	LDS Houston Mission
2510 Jefferson Dr.	1110 W. Clayton St.	704 E. Waring St.
Liberty, TX 77575	Dayton, TX 77535	Dayton, TX 77535
First United Methodist Church	Grimaldo Solome	Life Fellowship Church
106 S. Cleveland St.	2610 Newman St.	1935 Highway 146 Byp.
Dayton, TX 77535	Liberty, TX 77575	Liberty, TX 77575
First United Methodist Church	Hardin United Methodist Church	Lily of the Valley Bapt Church
219 Cardinal Dr.	1005 Highway 834 W.	3802 Oilfield Rd.
Liberty, TX 77575	Liberty, TX 77575	Liberty, TX 77575
First United Methodist Church of Liberty	Harvest Time Revival Center	Maranatha Church
539 Main St.	501 Austin St.	12319 Highway 146
Liberty, TX 77575	Liberty, TX 77575	Dayton, TX 77535
First United Pentecostal Church	Heights Baptist Church	Melchizedek Divine Church
13631 FM 3360	2401 Jefferson Dr.	2842 Highway 321
Dayton, TX 77535	Liberty, TX 77575	Dayton, TX 77535
Glad Tidings Pentecostal Church Of God	Immaculate Conception Church	Midway Baptist Church
29 Blue Lake Dr.	411 Milam St.	9160 FM 1409
Huffman, TX 77336	Liberty, TX 77575	Dayton, TX 77535
Godfrey Chapel Church of God In Christ 508 Lamar St. Liberty, TX 77575	International Mission Center Inc-A N Ojionuka Ministries 1801 Grand Ave. Liberty, TX 77575	Moss Hill Pentecostal Church 127 Highway 105 E. Liberty, TX 77575
God's Word In Action International Faith Center 5578 FM 1960 Dayton, TX 77535	Kenefick Southern Baptist Church 3536 FM 1008 Dayton, TX 77535	Mt. Olive Baptist Church 1406 Beauty St. Dayton, TX 77535
Gospel To the Unreached Mllns	Kingdom Hall-Jehovah's Witness	Mt. Pleasant Baptist Church
24210 E. Lake Houston Pkwy.	3620 E. Highway 90	2812 N. Cleveland St.
Huffman, TX 77336	Liberty, TX 77575	Dayton, TX 77535

Mt. Olive Baptist Church Olive Bethel Baptist Church South Liberty Methodist 1406 Beauty St. 5830 FM 1011 Rd. 3410 Oilfield Rd. Dayton, TX 77535 Liberty, TX 77575 Liberty, TX 77575 Mt. Pleasant Baptist Church Our Mother of Mercy Church St. Johns Baptist Church 2812 N. Cleveland St. 101 Donatto St. 3709 N. Main St. Dayton, TX 77535 Liberty, TX 77575 Liberty, TX 77575 Mt. Rose Baptist Church Our Mother of Mercy Church St. Joseph's The Worker Catholic Church 808 Washington St. P.O. Box 10356 804 S. Cleveland St. Liberty, TX 77575 Liberty, TX 77575 Dayton, TX 77535 Mt. Sinai Baptist Church Parsonage Liberty Church St. Paul Baptist Church 7 Davidson Ln. 1703 N. San Jacinto St. 3019 Grand Ave. Huffman, TX 77336 Liberty, TX 77575 Liberty, TX 77575 Mt. Zion Baptist Church Pleasant Hill Baptist Church St. Philip the Apostle Catholic 13627 FM 3360 801 S. Colbert St. 2308 3rd St. Dayton, TX 77535 Dayton, TX 77535 Huffman, TX 77336 New Beginnings Baptist Church Primera A St. Stephen's Episcopal Church 208 Seacamp St. 370 County Road 650 2041 Trinity St. Dayton, TX 77535 Liberty, TX 77575 Dayton, TX 77535 New Life Church Primera Iglesia Bautista Star Baptist Church 3056 FM 1008 1022 Confederate St. 2007 County Road 133 S. Dayton, TX 77535 Liberty, TX 77575 Liberty, TX 77575 New Work Family Worship Center Primera Iglesia Bautista Ten Commandments Ministry 2512 Grand Ave. 70 County Road 2340 24915 FM 2100 Rd. Liberty, TX 77575 Dayton, TX 77535 Huffman, TX 77336 North Main Baptist Church Inc. Shiloh Ministries **Trinity Baptist Church** 4709 N. Main St. 8275 FM 770 Rd. S. 408 W. Clayton St. Dayton, TX 77535 Liberty, TX 77575 Liberty, TX 77575

E - 15

Trinity Lutheran Church

2014 Scout St.

Liberty, TX 77575

Simmons Bottom Assembly of God

2126 County Road 2328

Dayton, TX 77535

Church

Old River Assembly

40 County Road 401

Dayton, TX 77535

Trinity Valley Baptist Church 801 Sam Houston St. Liberty, TX 77575

Turkey Creek Baptist Church 1600 Wallisville Rd. Liberty, TX 77575

Valley Community Bible Church 1507 N. San Jacinto St. Liberty, TX 77575

Vine Life Fellowship 910 Old Atascocita Rd. Huffman, TX 77336



#### LUCE BAYOU INTERBASIN TRANSFER PROJECT

Jayson M. Hudson U.S. Army Corps of Engineers Regulatory Branch P.O. Box 1229 Galveston, Texas 77553-1229 Jayson.M.Hudson@usace.army.mil www.swg.usace.army.mil/reg

## SAVE THE DATE



# U.S. Army Corps of Engineers Galveston District

#### **Public Scoping Meeting**

Environmental Impact Statement for the Luce Bayou Interbasin Transfer Project

## July 21, 2011

5:30pm - 8pm
Dayton Community Center
801 S. Cleveland St, Dayton, TX



#### **Purpose**

The purpose of this Environmental Impact Statement (EIS) public scoping meeting is (1) to provide information on the proposed project and alternatives and (2) to obtain information from the community concerning the subjects to be studied in detail by the EIS.

The purpose of the Luce Bayou Interbasin Transfer Project (LBITP) is to provide drinking water for the City of Houston and the surrounding area using the City's existing right to withdraw water from the Trinity River.

#### **EIS Public Scoping Meeting Schedule**

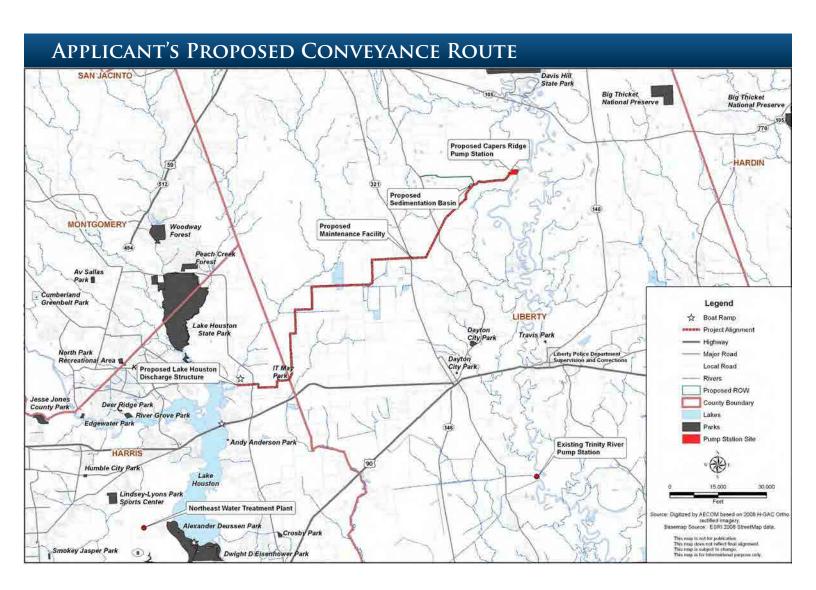
5:30pm	Registration, public commen sign-up, project exhibits and information review
6:30pm	Welcome and Introductions
6:45pm	Presentation
7:00pm	Public Comment Period
8:00pm	Adjournment

#### haak

The City of Houston needs water by 2020 to meet water demand as identified by the City and included in the approved 2012 State Water Plan.

#### Goals

The goal of the EIS is to fully assess the potential social, economic, and environmental impacts of the construction and operation of the LBITP so that the Corps of Engineers may make their decision on the Department of the Army permit application to allow the LBITP to proceed in accordance with Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act. Your participation in the EIS process is appreciated; for your convenience, the facilities are ADA compliant and ASL and Spanish translators will be available. The Corps expects that the Draft EIS and related materials will be made available by December 2011 from their website at http://www.swg.usace.army.mil/reg



### **PROCESS**

